

CITY MULTI



Air conditioning is an ideal way of controlling the temperature, movement and cleanliness of air inside any building, large or small. With today's buildings being so well insulated and increasingly full of electronic equipment, the need for effective climate control is greater than ever. Not only does it cool in the summer months, but air conditioning can also heat, doing away with the need for separate heating systems altogether. More and more people today are enjoying the benefits of comfortable working and living environments made possible with air conditioning.

Unsurpassed air conditioning from Mitsubishi Electric

Known the world over, the name Mitsubishi is a trusted household name associated with a variety of products and services. Founded in 1907, the company known today as Mitsubishi Electric, quickly rose to the forefront of the air conditioning industry - a position we still enjoy today. We pride ourselves on offering some of the most energy efficient systems available on the market.



Our Latest Technologies

VRF system

VRF stands for Variable Refrigerant Flow. A VRF air conditioning system modulates the flow of refrigerant depending upon the capacity requirements of the building. A VRF system comprises of condensing unit sited externally and a series of multiple heating to the occupied space.

Inverter driven technology

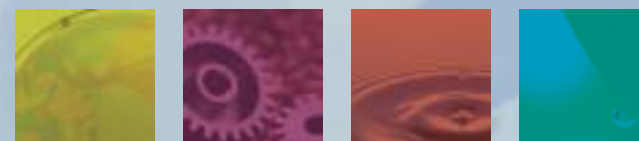
At Mitsubishi Electric we strive to continually meet the increasing demands of our customers, being the first in the industry to offer highly advanced 'inverter driven' systems. Using inverter technology our systems produce just the right amount of output to match the exact requirement of any building. These systems work so efficiently that they don't waste valuable energy by over-heating or over-cooling, resulting in greatly reduced running costs. Alternative systems that may appear cheaper, can often cost substantially more to run, making us the most cost effective choice all round.

Intelligent Power Module (IPM) technology

The City Multi range from Mitsubishi Electric provides precise control of energy input, through utilization of Intelligent Power Module (IPM) technology. Employing this technology it is possible to closely match the building requirements, achieving more accurate control of the occupied space. By using incremental 1Hz steps of capacity control, the amount of power input required is significantly reduced, resulting in greatly improved COP's.

R410A refrigerant

As scientific evidence points to man-made chemicals for the damage caused to the ozone layer, we only use chlorine-free refrigerants that are safe and have 'zero ozone depletion potential'. Accordingly, as our systems require less energy to run, they have a significantly lower indirect global warming potential too. In short, our constant investment and product development possible, whilst protecting the environment at the same time.

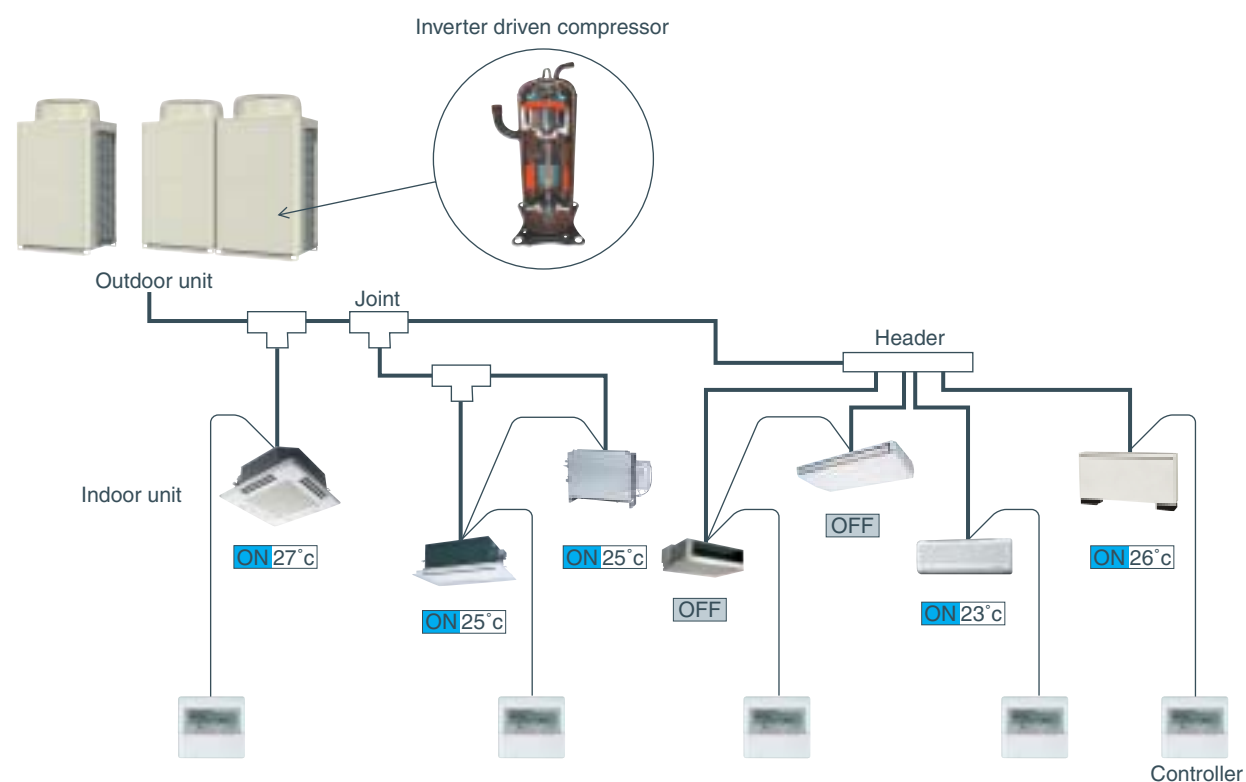


VRF system

Our answer to VRF

Mitsubishi Electric sets the boundaries of VRF technology with the City Multi range, which is available using R410A refrigerant with zero ODP (Ozone Depletion Potential). The range has been specifically designed for today's building requirements and addresses key market issues such as energy efficiency, adaptability and reliability. With user friendly control systems utilizing Internet technology and integrated cooling and ventilation indoor units, City Multi is the benchmark and market leader in VRF technology.

VRF is a multi and direct expansion type air conditioning system that one outdoor unit can be connected with multiples of indoor units. The amount of refrigerant can be changed freely according to the load in the indoor unit because inverter compressor is used in the outdoor unit. Zoning in a small office is easily made possible with indoor unit whose minimum capacity is very small. Energy conservation is easily handled because individual indoor unit can stop and start its operation as needed. Indoor unit has a lot of models in order to suit various interior design needs. Appliance to control separating heat of cooling in evaporation from heat in condensation is becoming important in air conditioning in the building.



Sophisticated yet simple technology

Reliable

Designed and manufactured to the highest standards, the City Multi range offers one of the most reliable air conditioning systems available. Simple to install and easy to maintain, this range provides ideal solutions you can trust to protect your investment.



>All the City Multi outdoor units are made in Japan under stringent control.



Inverter Driven Compressor Technology - now up to 50HP



Low
Starting
Currents

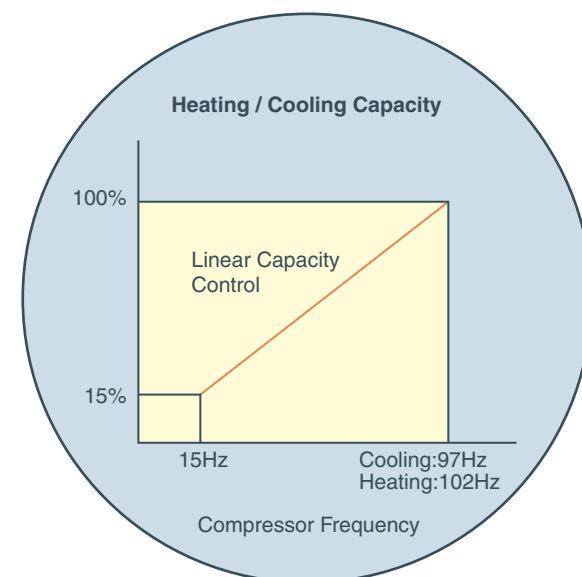
Using inverter driven technology saves energy for several reasons:

The compressor varies its speed to match the indoor cooling and/or heating demand and therefore only consumes the energy that is required.

When an inverter driven system is operating at partial load, the energy efficiency of the system is significantly higher than that of a standard fixed speed, non inverter system.

The fixed speed system can only operate at 100%, and partial load conditions prevail for the majority of the time. Therefore fixed speed systems cannot match the annual efficiencies of inverter driven systems.

Using proven single inverter driven compressor technology, the City Multi range is favoured by the industry for low starting currents (only 15 amps for a 16HP THM-A outdoor unit), a smooth transition across the range of compressor frequencies and for eliminating systems.



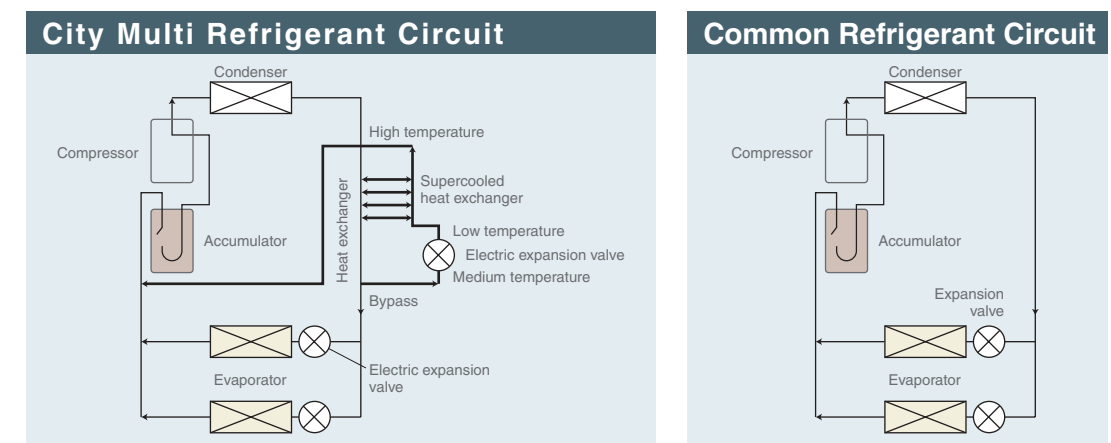
>All the City Multi compressors are inverter-driven type (4~50HP).



Unbeatable Efficiency

Heat Interchange Circuit

The unique Heat Interchange Circuit (HIC) enhances efficiency by providing additional sub-cooling and allows the expansion device to control more effectively the refrigerant distribution, thereby increasing the operating efficiency and reducing the volume of refrigerant in each system.



Intelligent Power Module (IPM) Technology

The THM-A range from Mitsubishi Electric provides precise control of energy input, through utilization of Intelligent Power Module (IPM) technology. Employing this technology it is possible to closely match the building requirements, achieving more accurate control of the occupied space. By using incremental 1Hz steps of capacity control, the amount of power input required is significantly reduced, resulting in greatly improved COP's.

In addition, IPM technology ensures effective performance under part load conditions, a condition that most systems will be in for the majority of the normal working life cycle. By taking account the efficiency at both part load, and peak load conditions, R410A City Multi is designed to provide unbeatable year round/seasonal efficiency.

The difference between THM-A and previous Mitsubishi Electric models

Technology is key when increased efficiency is demanded.
The City Multi THM-A range is able to deliver this in simple ways.

A highly efficient R410A scroll compressor design results in less friction losses at the motor. A simplified refrigerant circuit (low pressure loss) including new accumulator design also adds a few more points to the efficiency scale. Enhancements to the heat interchange circuit, an inverter driven fan motor and a heat exchanger design again add vital increases to overall system efficiency and COP's.

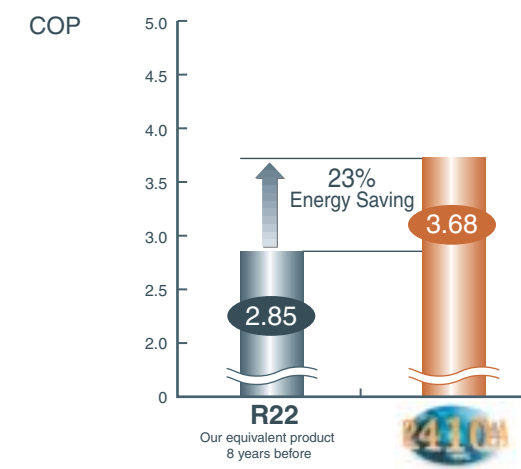
The importance of COP

COP stands for "Co-efficient of performance". It is a measure of the useful energy a system can deliver compared to the energy it consumes. It is calculated by dividing the energy output by the energy input of a system. The higher the figure then the more efficient the system is deemed to be, with commensurate reduced running costs. Mitsubishi Electric VRF models, the world's highest energy-efficient ACs, will undoubtedly reduce millions of tons of CO₂ emissions.



Total Energy Conservation

Comparison of COP (energy efficiency) – 10HP system



As of September, 2006 (based on internal survey)

**Industry leading high COP
(Coefficient of Performance) is
realized**

E

fficient R410A refrigerant



History of refrigerant

R22, an HCFC-based refrigerant, has been a popular choice for most chillers. R22 has been targeted by the Montreal Protocol to be phased out in new equipment. Additionally, the European Union and other countries governments are enforcing a ban of HCFC-based refrigerants for new installations.

Because of these restrictions, R410A refrigerants is increasingly available. R410A is a blend of HFCs, which do not deplete the ozone but may contribute to global warming.

Technical aspects of refrigerant

R410A is a more efficient refrigerant as it has a higher specific heat capacity when compared to R407C or R22. This higher energy carrying capacity allows for smaller pipe sizes, longer pipe runs and reduces the volume of refrigerant within a system. This is a major factor when complying with EN378, a European standard concerning safety and environmental requirements in the design, manufacture, installation, operation, maintenance and disposal or refrigerating systems.

For the Environment

Enhancing environmental care(measures for the RoHS Directive and the refrigerant reduction)

Every unit is in compliance with the RoHS Directive,* which stands for the restriction of hazardous substances: Lead-free soldering is used to avoid Lead Groundwater Contamination on the print board. The amount of refrigerant on the unit has also been reduced to enhance environmental care.

* RoHS Directive: the restriction of the use of certain hazardous substances in electrical and electronic equipment that has been sold in EU since July 2006

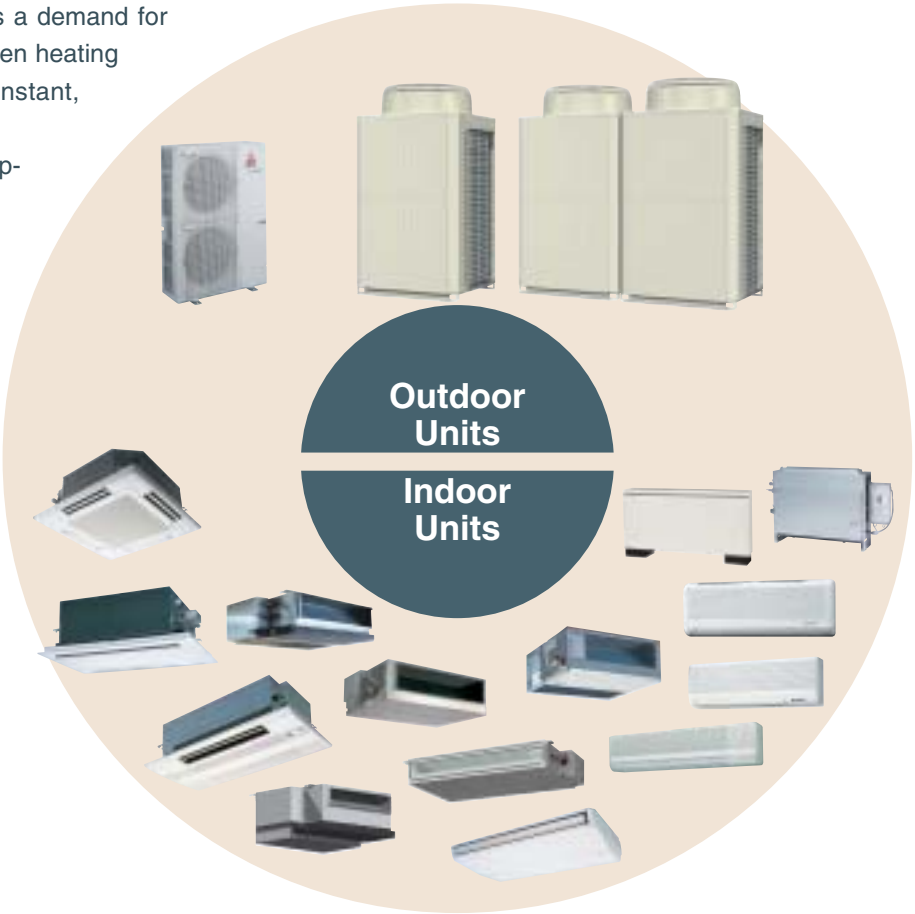


The City Multi range

Solutions for more demanding applications

The City Multi range is Mitsubishi Electric's answer to large scale VRF (Variable Refrigerant Flow) applications. The efficiency of City Multi (in particular the new R410A THM-A Series models) is second to none and offers a substantial increase in energy efficiency and corresponding EER/COP ratings.

The City Multi Y Series range offers a simple and flexible solution where there is a demand for a changeover capability between heating and cooling, ensuring a constant, comfortable indoor climate. It also provides a modular approach to air conditioning requirements – providing an ideal solution for new build, refurbishment projects and phased installations. With a wide range of 60 indoor units and 13 outdoor units, that include single phase 4, 5 and 6HP models, the choice is impressive.



A Comprehensive City Multi Range

Product Range – Outdoor Units

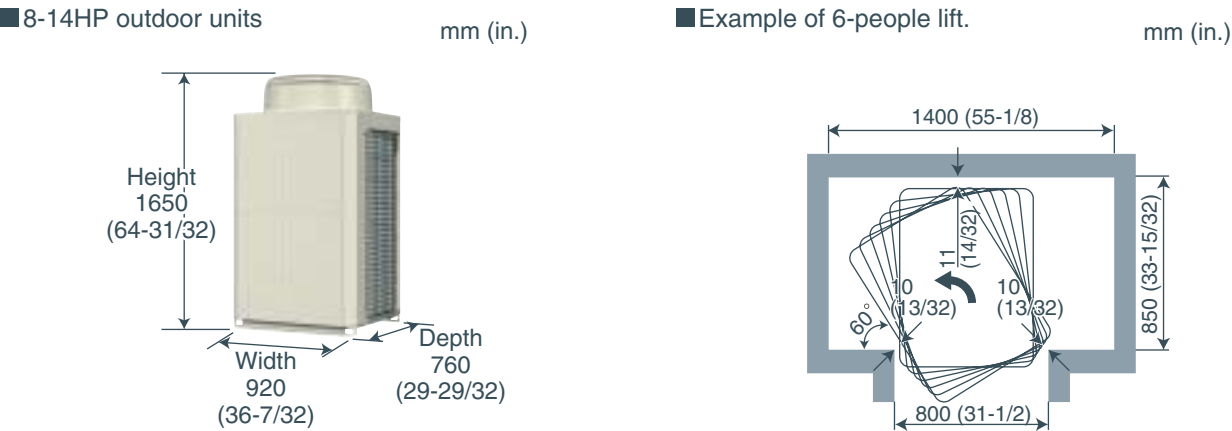


		cooling / heating						
		4HP	5HP	6HP	8HP	10HP	12HP	14HP
HEAT PUMP		PUMY-P100VHM	PUMY-P125VHM	PUMY-P140VHM	PUHY-P200THM-A	PUHY-P250THM-A	PUHY-P300THM-A	PUHY-P350THM-A
COP		3.35/3.42	3.24/3.69	2.90/3.23	3.90/4.13	3.41/3.95	3.68/3.98	3.07/3.71
		16HP	18HP	20HP	22HP	24HP	26HP	28HP
HEAT PUMP		PUHY-P400THM-A	PUHY-P450THM-A	PUHY-P500TSHM-A	PUHY-P550TSHM-A	PUHY-P600TSHM-A	PUHY-P650TSHM-A	PUHY-P700TSHM-A
COP		3.39/4.04	3.06/3.84	3.16/3.67	3.49/3.73	3.15/3.75	3.25/3.81	3.06/3.70
		30HP	32HP	34HP	36HP	38HP	40HP	42HP
HEAT PUMP		PUHY-P750TSHM-A	PUHY-P800TSHM-A	PUHY-P850TSHM-A	PUHY-P900TSHM-A	PUHY-P950TSHM-A	PUHY-P1000TSHM-A	PUHY-P1050TSHM-A
COP		3.16/3.83	3.03/3.79	3.17/4.01	3.02/3.94	3.50/4.03	3.47/4.00	3.26/3.89
		44HP	46HP	48HP	50HP			
HEAT PUMP		PUHY-P1100TSHM-A	PUHY-P1150TSHM-A	PUHY-P1200TSHM-A	PUHY-P1250TSHM-A			
COP		3.10/3.85	3.00/3.78	3.07/3.84	2.97/3.87			



Due to the compact design of outdoor unit, industry leading space saving is realized. Therefore, the new outdoor unit can be installed more freely than the conventional model.

The downsized outdoor unit can be transported through a 800mm wide door.



The unit can easily be transported even into slender buildings.

City Multi makes it easy.



Industry leading weight saving is realized.

As of September, 2006 (based on internal survey)



The manageability of the outdoor unit has been improved due to drastic reduction in unit weight, leading to easy transportation, installation, and reduction in withstand load.

10HP outdoor unit



Approx. 230kg

Approx. 45kg reduction in weight



Approx. 185kg

	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	24HP	26HP	28HP
Weight(kg)	185	185	210	210	240	240	370	395	395	420	420
	30HP	32HP	34HP	36HP	38HP	40HP	42HP	44HP	46HP	48HP	50HP
Weight(kg)	450	450	480	480	635	635	660	660	660	690	690

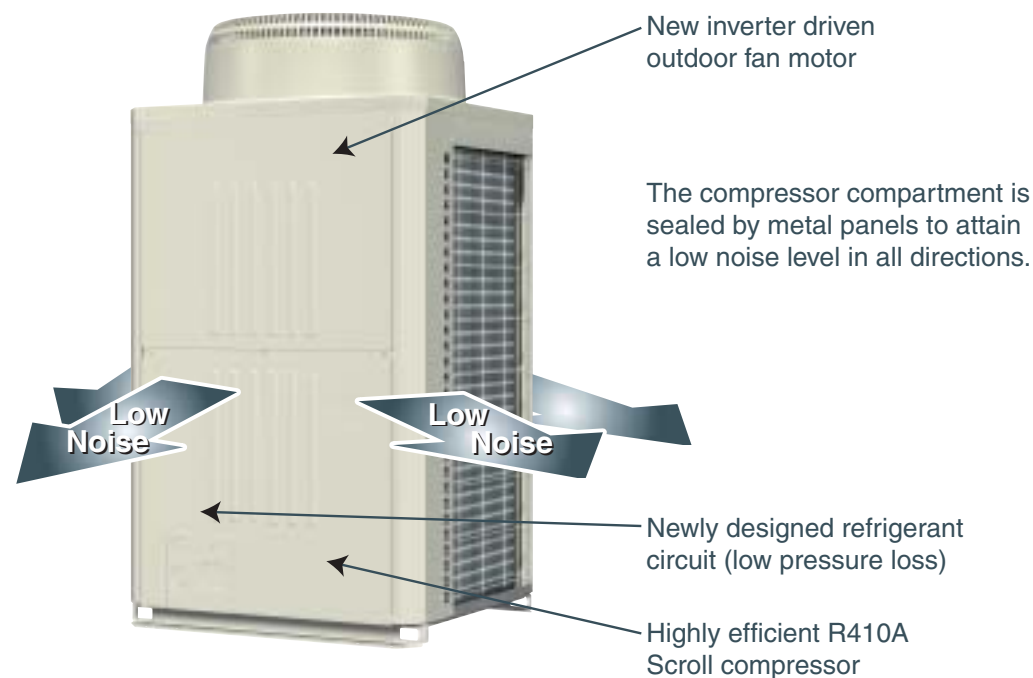


Features and Benefits

New
Improved
Figures

Low Noise Levels New Fan Design

City Multi VRF systems led the introduction of larger single fan rotors some ten years ago, achieving substantially lower noise levels over multiple designs. Continuing the development in the areas of blade shape and weight, Mitsubishi Electric have managed to achieve even higher performance and lower noise levels. To reduce noise levels further and comply with inner city residential noise regulations, all outdoor units include Night Set-back mode. This function works by lowering the fan speed and compressor frequency proportionally with reduction in demand.

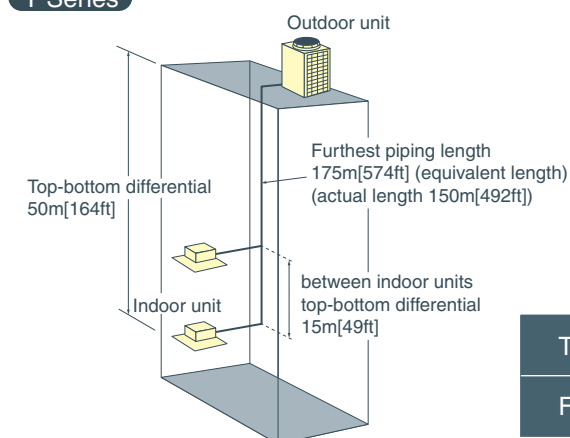


The Strength of City Multi

Increased Pipe Lengths

Total system pipe lengths of up to 300m(984ft) and furthest pipe lengths of 150m(492ft) make the City Multi Y series system one of the most flexible VRF systems in the market

Y Series



	R410A	R22
	Y Series	
Total Pipe Length	300(984)	240(787)
Furthest Piping Length	150(492)	120(393)

m(ft)

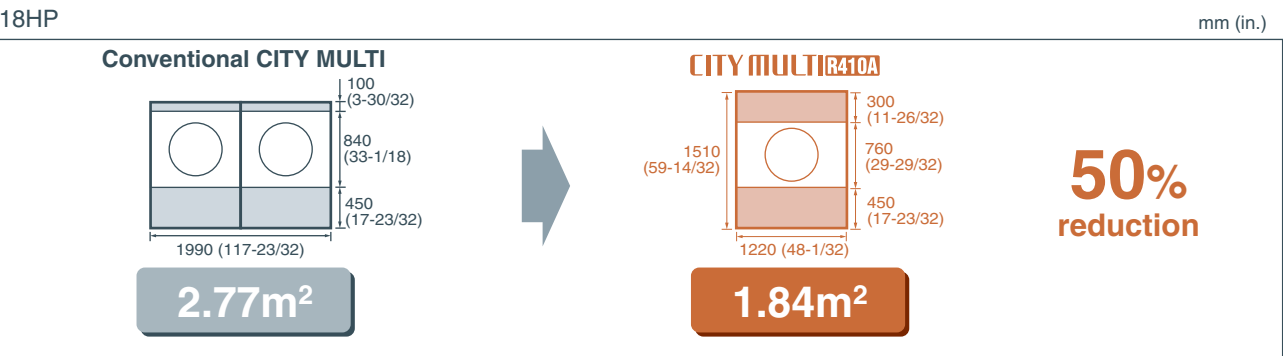
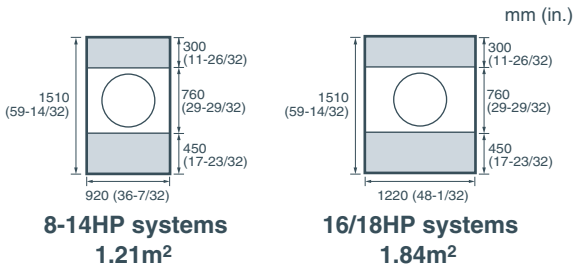




The Strength of New City Multi

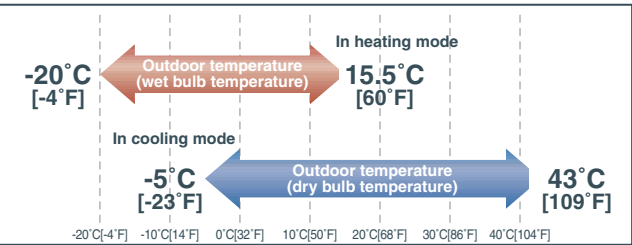
Effective Use of Space

The new models have a smaller foot print and service space requirement than the R22 models.



Heating Operation Range

At low ambient temperature the guaranteed operating range in heating is now lowered to **-20°C[68°F]**



Operating range in cooling is from an outdoor temperature of -5°C[23°F], while that in heating has expanded to an outdoor temperature of -20°C[-4°F]

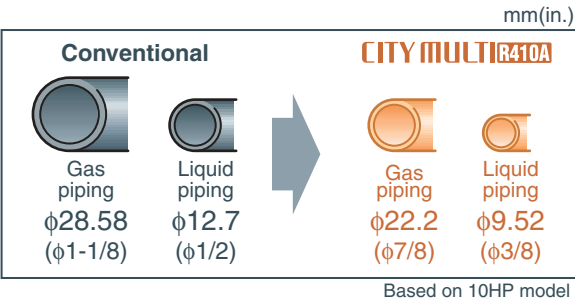
Blue Fin Treatment

The anti-corrosion Blue Fin treatment of the heat exchanger is especially effective in urban environments where the build up of traffic pollutions can damage the aluminum fins reducing the capacity and life expectancy of the unit. All City Multi R410A outdoor units have been treated in this fashion.



R410A Pipe Sizing

As R410A has a higher specific heat capacity than R22, the pipework is smaller. This means the pipe itself is cheaper, easier to install and therefore less riser space is required within the building.



Remote Controller

Individual Remote Controller

Centralized Remote Controller

The importance of control

The need for control is paramount in order to optimise the performance of any air conditioning system and minimise its running costs. Mitsubishi Electric offer a wide range of control options designed to do just this.

Operating an air conditioning system without the right control can prove costly. It's therefore important to ensure that every system is correctly specified to the degree of control it requires. Mitsubishi Electric have a wide range of controls available 'off-the-shelf' and where needed, individual control systems can be specifically designed to suit.

Good controls will benefit any application, large or small. Air conditioning products need to react to a variety of factors: different room sizes, usage and staff levels; changes in the climate; electronic equipment and lighting ...the list goes on. So whatever the application, optimum control of air conditioning systems is essential and will result in a constant, comfortable environment, which in turn is both energy and cost efficient.

A degree of difference

When an air conditioning system is not properly controlled, it will not run as efficiently as it should. For every degree that the system deviates from the required temperature, energy costs can rise by up to 5%. Specify one of the many control options from Mitsubishi Electric to ensure air conditioning works as intended, whilst giving the optimum amount of control.

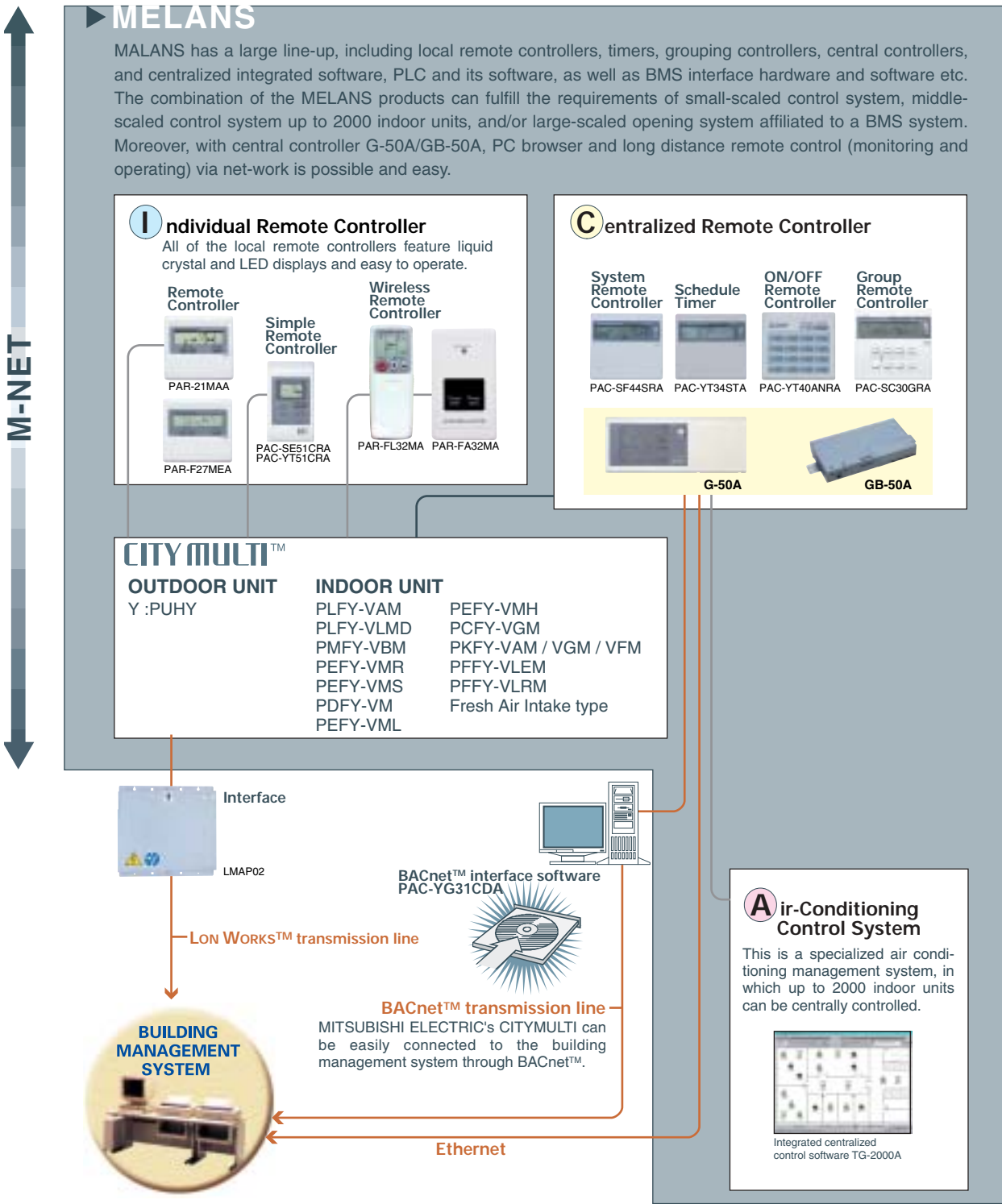
The simpler, the better

With the array of comprehensive control systems available from Mitsubishi Electric, it becomes simple to design and install air conditioning systems. From a simple handheld controller to a G50 system - you are in control.



System Controller

MITSUBISHI ELECTRIC's Air-conditioner Network System (MELANS) leads air conditioner management a PC browser and Network era.



Integrated Communications Control with Mitsubishi's Unique Transmission Network (M-NET)

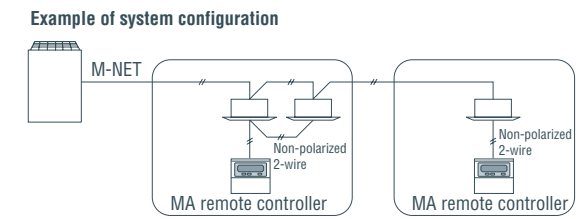
Model		Local remote controller				System controller							
		Remote controller		Simple remote controller	Wireless remote controller	System remote controller	Schedule timer	ON/OFF remote controller	Group remote controller	Centralized controller			
		PAR-21MAA	PAR-F27MEA	PAC-SEYT51CRA	PAR-FL32MA PAR-FA32MA	PAC-SF44SRA	PAC-YT34STA	PAC-YT40ANRA	PAC-SC30GRA	GB-50A	GB-50A	TG-2000A	
No. of units controllable (Groups (G) / units)		1G/16units	1G/16units	1G/16units	1G/16units	50/50	50G/50U	16/50	8G/16units	50G/50units GB-50A browser	50G/50units GB-50A browser	2000G/2000units	
Operation	Start / Stop	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎
	Operation mode	○	○	×	○	◎	○ ^{*4}	×	◎	◎	×	◎	◎
	Temperature setting	○	○	○	○	◎	○ ^{*4}	×	◎	◎	×	◎	◎
	Permit / Prohibit direction	×	×	×	×	◎	○ ^{*4}	×	×	◎	×	◎	◎
	Fan speed	○	○	○	○	◎	×	×	◎	◎	×	◎	◎
	Air flow direction	○	○	×	○	◎	×	×	◎	◎	×	◎	◎
Monitoring	ON/OFF	○	○	○	○	◎	◎	○	◎	◎	○	◎	◎
	Error flashing	○	○	○	○	○	○	○	○	○	△	○	○
	Error content	○	○	○	○	○	○	○	○	○	×	○	○
	Filter sign	○	○	×	×	○	×	×	○	○	×	○	○
	Operating hour	×	×	×	×	×	×	×	×	×	×	×	●
	Operation mode	○	○	○	×	○	×	×	○	○	×	○	○
	Set temperature	○	○	○	×	○	×	×	○	○	×	○	○
	Indoor temperature (intake)	○	○	×	×	×	×	×	○	○	×	○	○
	Permit / Prohibit	○	○	○	○	○	○	△	○	○	×	○	○
	Fan speed	○	○	○	×	○	×	×	○	○	×	○	○
Scheduling	Air flow direction	○	○	×	×	○	×	×	○	○	×	○	○
	Weekly	○ ^{*5}	×	×	×	×	○	×	×	◎ ^{*5}	●	×	●
	Annual (Designated day setting)	×	×	×	×	×	×	×	×	×	●	×	●
	One day	○	○	×	○	×	×	×	×	×	●	×	●
	Times of stops / Starts per day	8 ^{*5}	1/1	×	1/1	×	16	×	×	◎ ^{*5}	3/3	12	12
	Times of stops / Starts per week	56	×	×	×	×	112	×	×	◎ ^{*5}	21/21	84	84
	Auto off timer	○	○	×	×	×	×	×	×	×	×	×	×
Recording	Minimum setting unit (minutes)	1 ^{*5}	10 ^{*5}	×	10	×	5	×	×	◎ ^{*5}	10	1	1
	Error history	×	×	×	×	○	×	×	○	○	×	○	○
	Daily / Monthly reports	×	×	×	×	×	×	×	×	×	×	×	○
Others	Electricity charges	×	×	×	×	×	×	×	×	×	×	×	●
	Set temperature range limit	○	○	×	×	△	×	×	×	×	○ ^{*2}	×	○ ^{*2}
Control and management	Auto lock	○	○	×	×	×	×	×	×	×	×	×	×
	Ventilation (group / interlocked)	×/○	×/○	×	×	○	○	○/×	×/○	○	○/○ ^{*2}	×	○/○ ^{*2}
	Group setting	○ ^{*1}	○	×	×	○	○	○	○	○	○ ^{*2}	×	○ ^{*2}
	Block setting	×	×	×	×	×	×	×	×	×	○ ^{*2}	×	○ ^{*2}
Operation	Revision of electricity charges	×	×	×	×	×	×	×	×	×	×	×	■
	Start / Stop	-/○	-/○	-/○	-/○	◎/◎	◎/◎	◎/◎ ^{*3}	-/◎	◎/◎	◎/◎	△/△	◎/◎
	Fan speed	-/○	-/○	-/×	×	◎/◎	×	×	-/○	◎/◎	◎/◎	-/×	◎/◎
	Ventilation mode	-/×	-/×	-/×	×	◎/×	×	×	-/×	◎/×	◎/×	-/×	◎/×
	Status	-/○	-/○	-/×	×	○/○	×	×	-/○	◎/◎	◎/◎	△/△	◎/◎
Monitoring	Fan speed	-/○	-/○	-/×	×	○/○	×	×	-/○	○/○	○/○	-/×	○/○
	Ventilation mode	-/×	-/×	-/×	×	○/×	×	×	-/×	○/×	○/×	-/×	○/×

*1: For group operation, cross-over wiring is required between indoor unit. *2: Installation possible at Initial setting tool.
*3: Interlock setting from local remote controller. *4: From schedule setting *5: When PAC-YT32PTA is connected.

Control Systems

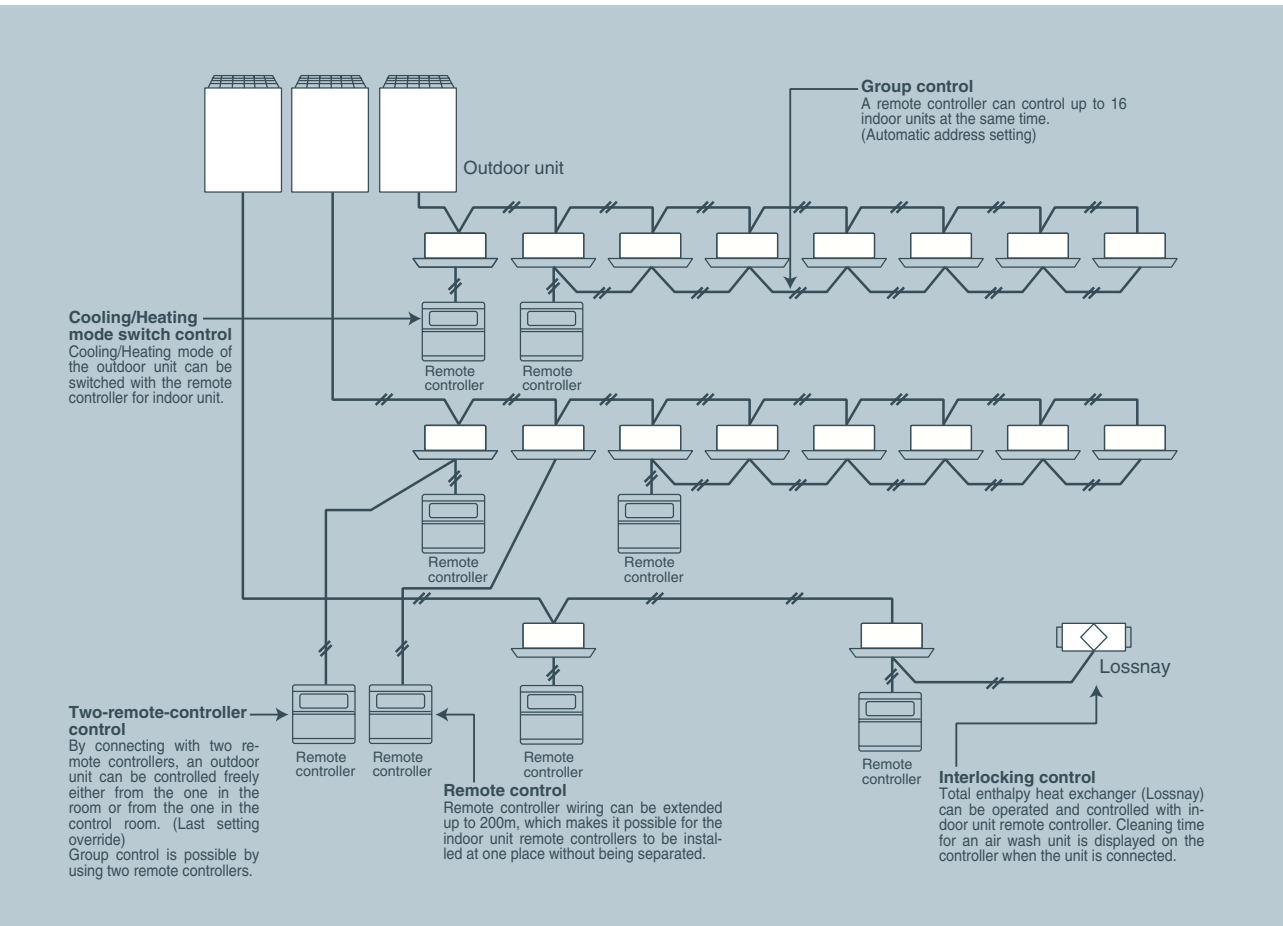
Individual Control Systems

Wired MA remote controller PAR-21MAA



- Dot matrix liquid crystal screen displays complete operating status.
- Digital display lets you set temperature in 1°C/°F increments.
- Weekly Timer: up to 8 ON/OFF/Temperature Settings can be made per day. The time can be set in 1-minute increments.
- Equipped with a thermostat sensor in the remote controller that makes possible more comfortable room temperature control.
- Enables you to select cool/heat/fan operation mode with the indoor remote controller of your choice without using the cool/heat selector.
- Ability to limit the set temperature (upper and lower temperature can be set.)
- Ability to restrict setting changes (either all changes or all except ON/OFF)
- Constantly monitors for malfunctions in the system, and is equipped with a “self-diagnosis function” that lets you know by error code immediately when a malfunction occurs.
- Dimensions: 100 x 120 x19 mm

■ Various control systems can be offered with indoor unit remote controller.



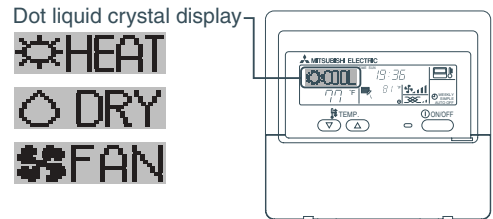
New display-Larger,easier-to-see characters

Various information is displayed and conveyed clearly, enabling more accurate operation of the air conditioner.

Dot Liquid Crystal Display (LCD)

The dot liquid crystal display enables quick understanding of the operation state.

- Display example [Operation mode]



Multi-language Display

In addition to English, contents can be displayed in seven other languages.

This function makes the remote controller very useful in facilities where foreigners are present.

- Display example [Cool mode]



Multi Language Display Example

[Dot display table]		English	Germany	Spanish	Russian	Italy	Chinese	French	Japanese
Selecting language		English	Germany	Spanish	Russian	Italy	Chinese	French	Japanese
Waiting for start-up		PLEASE WAIT	←	←	←	←	←	←	←
Operation mode	Cool	COOL	Kühlen	FRÍO	Охлаждение	COOL	制冷	FRROID	冷房
	Dry	DRY	Trocknen	DESHUMIDIFICACION	Сушка	DRY	除湿	DESSECH	ドライ
	Heat	HEAT	Heizen	CALOR	Тепло	HEAT	制热	CHAUD	暖房
	Auto	AUTO	AUTO	AUTO-MATICO	Авто	AUTO	自动	AUTO	自動
	Auto(Cool)	COOL	Kühlen	FRÍO	Охлаждение	COOL	制冷	FRROID	冷房
	Auto(Heat)	HEAT	Heizen	CALOR	Тепло	HEAT	制热	CHAUD	暖房
	Fan	FAN	Lüfter	VENTILACION	Вентилятор	VENTILATIONE	送风	VENTILATION	送風
	Ventilation	VENTILATION	Gelüfte	VENTILACION	Вентиляция	VENTILATIONE	换气	VENTILATION	换气
Stand by (Hot adjust) Defrost		STAND BY	STAND BY	CALENTANDO	Оттайка	STAND BY	准备中	CHAUFFAGE	準備中
Set temperature		SET TEMP	TEMP. einstellen	TEMP. CONSIGUIR	Установить температуру	TEMPERATURA	设定温度	REGLOJE TEMPERATURE	設定温度
Fan speed		FAN SPEED	Lüftergeschwindigkeit	VELOCIDAD VENTILADOR	Скорость вентилятора	VELOCITA' VENTILATORE	风速	VITESSE DE VENTILATION	風速
Not use button		NOT AVAILABLE	Nicht verfügbar	NO DISPONIBLE	НЕ ДОСТУПНО	NON DISPONIBILE	无效按钮	NON DISPONIBILE	無効ボタン
Check (Error)		CHECK	Prüfen	COMPROBAR	Проверка	CHECK	检查	CONTROLE	点検
Test run		TEST RUN	Testbetrieb	TEST FUNCIONAMIENTO	Тестовый запуск	TEST RUN	试运行	TEST	试运行
Self check		SELF CHECK	Selbst-Prüfung	AUTO REVISION	Самодиагностика	SELF CHECK	自我诊断	AUTO CONTROLE	自己診断
Unit function selection		FUNCTION SELECTION	Funktionseinstellung	SELECCIÓN DE FUNCION	Выбор функции	SELEZIONE FUNZIONE	功能选择	SELECTION FONCTIONS	機能選択
Setting of ventilation		SETTING OF VENTILATION	Lüftersteuerung	CONFIG. VENTILACION	Настройка вентиляции	CONFIG. VENTILATIONE	换气设定	VENTILATION	换气設定

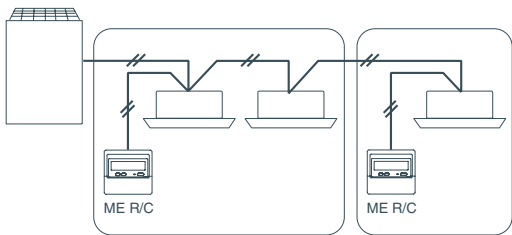
Control Systems

Individual Control Systems

Wired ME remote controller PAR-F27MEA



Example of system configuration



- This remote control requires that wiring is connected to only one outdoor unit.
- Group operation with multiple outdoor units is possible. Grouping can be changed freely, which makes dividing rooms for tenant easier.
- **Daily timer**
Repeated ON / OFF timer every day.
- **Auto OFF timer**
0:30, 1:00, 1:30, 2:00...4:00 one touch timer.
- **Function lock**
All functions or all functions except ON / OFF can be selected.
- **Limit setting of room temperature.**
- Dimensions:130 x 120 x 19 mm

Simple remote controller PAC-SE51CRA(M-NET) / PAC-YT51CRA(MA)

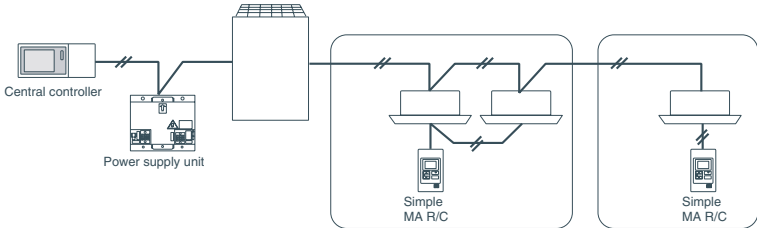


PAC-SE51CRA



- **Control: START/STOP, room temperature and fan speed**
- The only wiring required is cross-over wiring based on two-wire signal lines.
- Room temperature sensors are built-in.
- LCD temperature setting and display in 1°C /1°F unit.
- Can operate all types of indoor units
 - *Since this system has no operation mode switching, test operation, self-diagnosis or interlock setting functions, it should always be used in conjunction with the PAR-21MAA or other centralized controller.
 - *Combining ME remote controller and/or LOSSNAY remote controller in a group is not possible.
- Dimensions:120 x 70 x 41 mm

Example of system configuration



Wireless remote controller PAR-FL32MA / PAR-FA32MA



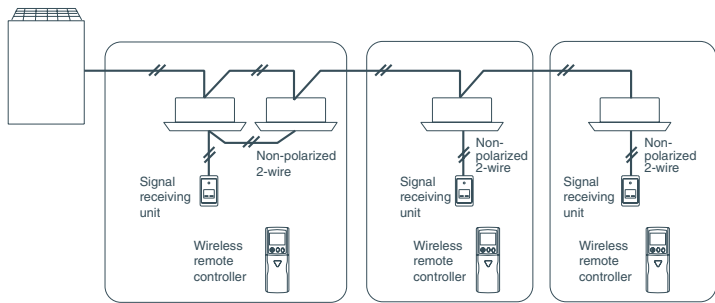
PAR-FL32MA



PAR-FA32MA

- No need to configure addresses for group operation.
- Lit LED keeps you informed of operation - blinking even gives you the error code via the number of blinks.
- Can be used with the MA remote controller.
 - *When used in group configurations, wiring between indoor units is required.
 - *Combining ME remote controller and/or LOSSNAY remote-controller in a group is not possible.
- **Optional LCD temperature setting and display in 1°C /1°F unit.**
- Dimensions:153 x 57 x 18 mm


Example of system configuration



Centralized Remote Controller

One system controller is available for use when you need to control up to fifty indoor units from one location. The PAC-SF44SRA also has hardwired connection available (On/Off input, fire alarm input, run output, fault output).

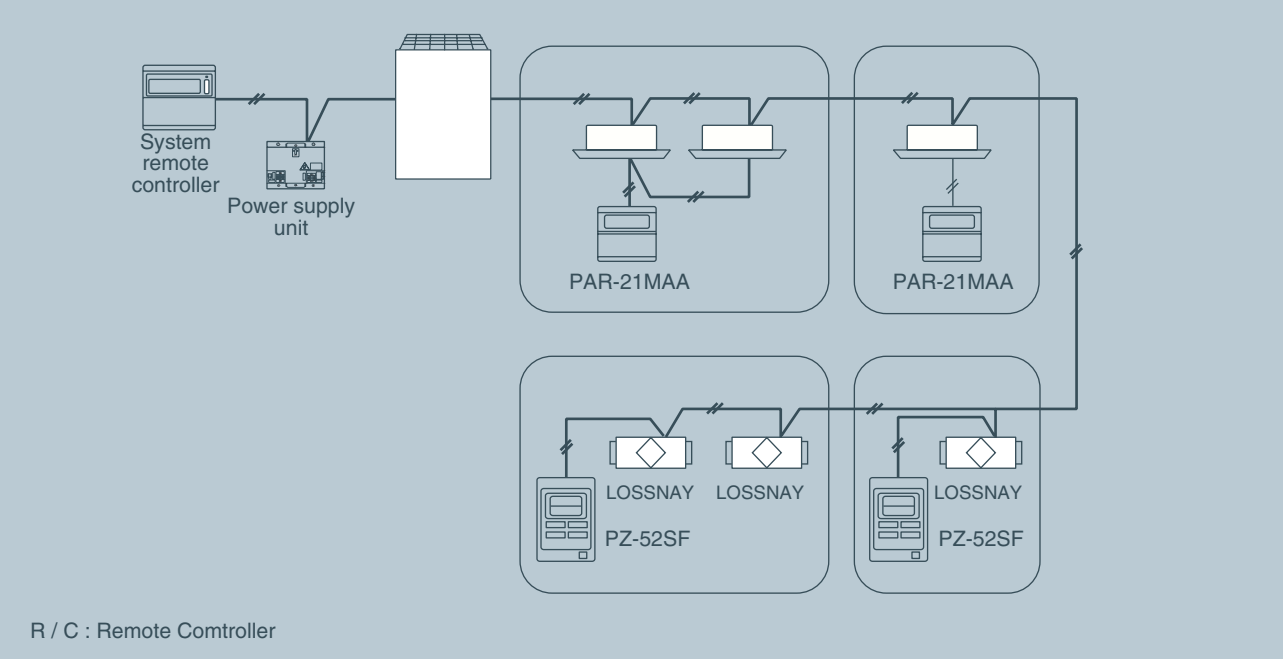
System remote controller PAC-SF44SRA



System Controller			
FUNCTION	DESCRIPTION	PAC-SF44SRA	
UNITS	Max No.Units	50 units/50 group	
		Operation	Displays
ON/OFF	Run and stop operation	✓	✓
MODE SELECTION	Switches between Cool/Dry/Auto/Fan/Heat. Operation Mode will vary depending on the indoor unit. Auto mode is available with only R2 and WR2 systems	✓	✓
TEMPERATURE SETTING	Sets the groups temperature control. Cool/Dry:19-30°C Heat:17-28°C Auto:19-28°C	✓	✓
FAN SPEED SETTINGS	4 speed - Lo-Mi1-Mi2-Hi 2 speed - Lo-Hi	✓	✓
AIR FLOW DIRECTION	Air Flow angles:100°-80°-60°-40° and auto swing	✓	✓
PERMIT/PROHIBIT FUNCTION	Run/Stop, Temperature Setting, Mode Selection and Filter Reset functions can be prohibited via a higher level system controller	✓	✓
INDOOR RETURN AIR TEMPERATURE	Measures the intake temperature of the master unit within the group		✓
ERROR INDICATION	Displays a 4 digit code and the affected unit address		✓
VENTILATION INTERLOCK	Allows the group to be interlocked with a heat recovery Lossnay unit	✓	✓
EXTERNAL INPUT	Hardwired connections available		On/Off /Fire Alarm
EXTERNAL OUTPUT	Hardwired connections available		On/Off /Faults

• Dimensions:130 x 120 x 19 mm


System example



R / C : Remote Controller

Mitsubishi Electric controllers are complimented by a weekly programmable timer, being able to control up to fifty indoor units. The PAC-YT34STA also has hardwired connection available (On/Off input, fire alarm input, run output, fault output).

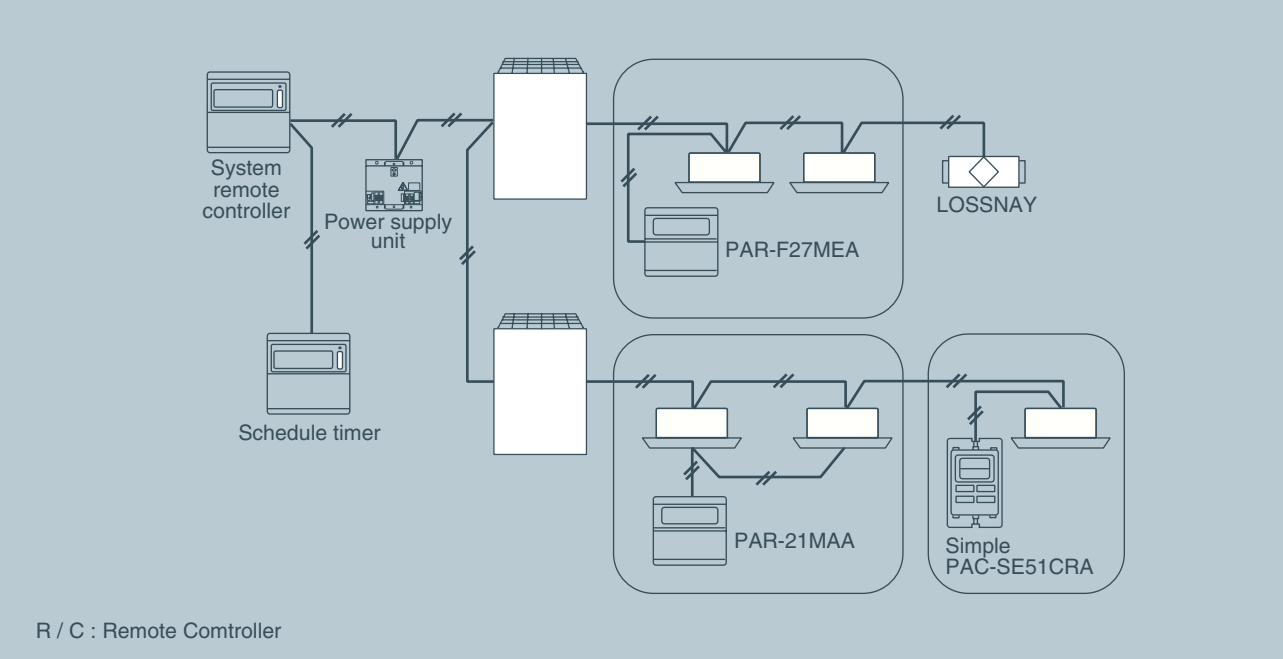
Schedule timer PAC-YT34STA



Programmable Timer			
FUNCTION	DESCRIPTION	PAC-YT34STA	
UNITS	Max No.Units	50 units/50 group	
		Operation	Displays
ON/OFF	Run and stop operation	✓	✓
MODE SELECTION	Switches between Cool/Dry/Auto/Fan/Heat. Operation Mode will vary depending on the indoor unit. Auto mode is available with only R2 and WR2 systems	✓	✓
TEMPERATURE SETTING	Sets the groups temperature control. Cool/Dry:19-30°C Heat:17-28°C Auto:19-28°C	✓	✓
CURRENT TIME	Set the time	✓	✓
ERROR INDICATION	Displays a 4 digit code and the affected unit address		✓
EXTERNAL INPUT	Hardwired connections available		On/Off /Fire Alarm
EXTERNAL OUTPUT	Hardwired connections available		On/Off /Faults

• Dimensions:130 x 120 x 19 mm

System example



R / C : Remote Controller

Centralized Remote Controller

Just press a switch to start. All of the units can be started stopped by pressing the main switch, and each unit in the group can be started stopped with individual switched.

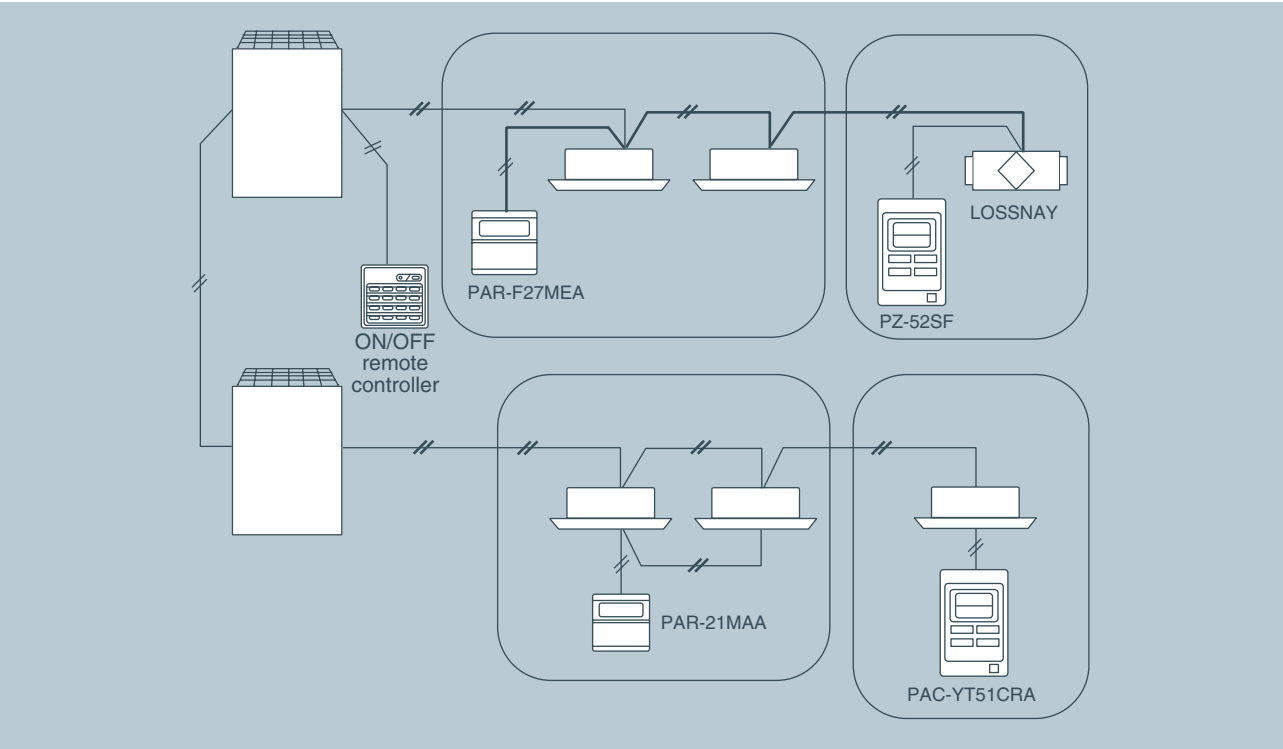
ON/OFF remote controller PAC-YT40ANRA



FUNCTION	DESCRIPTION	OPERATIONS	DISPLAY
ON/OFF	Run and stop operation for the air conditioner units	✓	✓
OPERATION MODE SWITCHING	Not available	×	×
TEMPERATURE SETTING	Not available	×	×
FAN SPEED SETTING	Not available	×	×
AIR FLOW DIRECTION SETTING	Not available	×	×
MANUAL OPERATION PROHIBIT/PERMIT (ON/OFF, OPERATION MODE, SETTING TEMPERATURE, FILTER RESET)	Compatible only with external input.	×	×
SPECIFIC MODE OPERATION PROHIBIT (COOLING PROHIBIT, HEATING PROHIBIT, COOLING/HEATING PROHIBIT)	Not available	×	×
ROOM TEMPERATURE DISPLAY	Not available	—	×
ERROR DISPLAY	LED flashes during failure. (The error code can be confirmed by removing the cover.)	—	✓
SCHEDULE OPERATION	Not available	×	×
VENTILATION OPERATION (INDEPENDENT)	Group operation of only LOSSNAY units possible. *Only ON/OFF of group.	✓	✓
VENTILATION OPERATION (INTERLOCKED)	The LOSSNAY will run in interlock with the operation of indoor unit. *The fan rate and mode cannot be changed. The LED will turn ON only during operation after interlocking.	✓	✓
EXTERNAL OUTPUT (ERROR OUTPUT, OPERATION OUTPUT)	*ON/OFF and "error/normal" are output with the level signal. *The optional output cable is required.	✓	✓
CONNECTION POSITION	Indoor/outdoor transmission line: Connectable Central system transmission line: Connectable (Power supply unit (PAC-SC50KUA) is needed.)	—	—

• Dimensions:130 x 120 x 19 mm

System example



Up to 8 groups can be operated (maximum of 16 units/. Just by pressing RAC-SC30GRA switches, groups can be started and stopped as a batch.

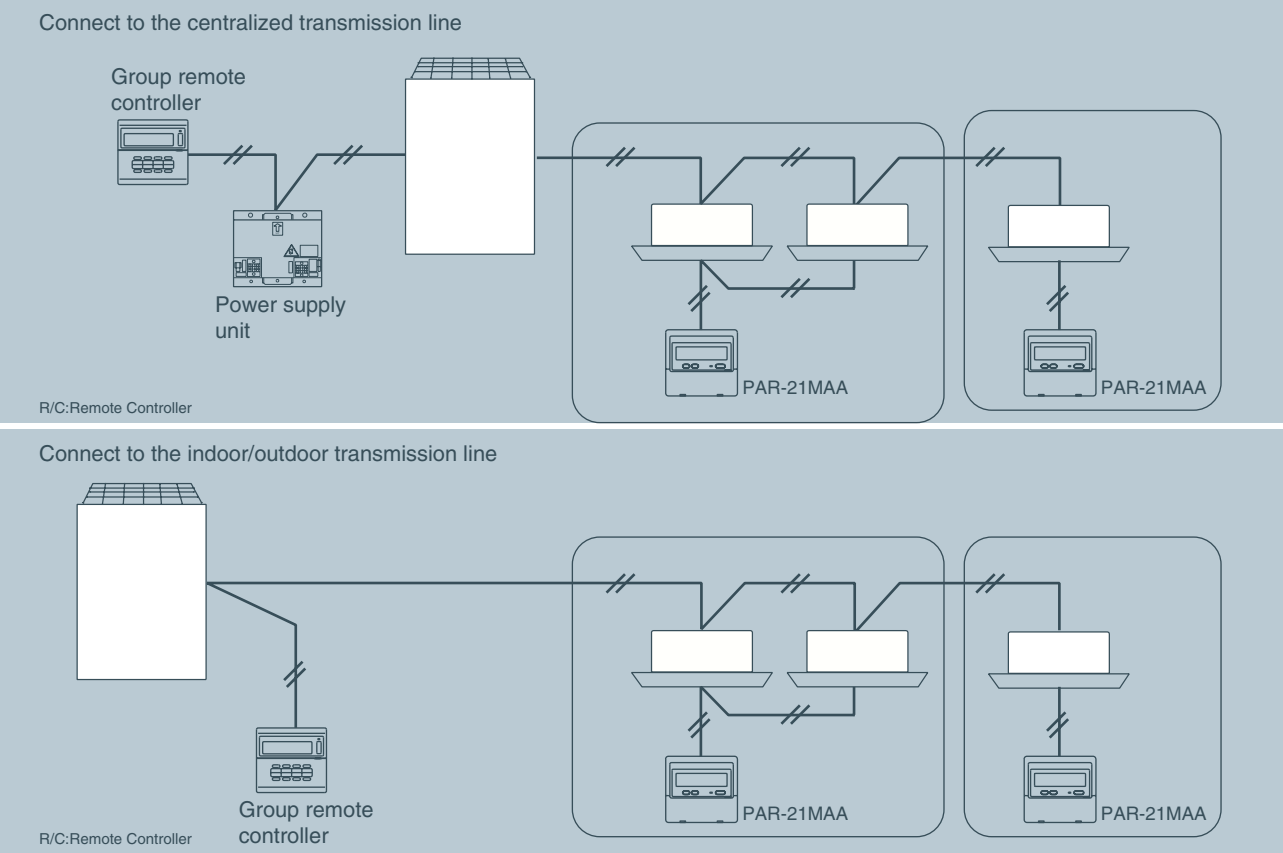
Group remote controller PAC-SC30GRA



FUNCTION	DESCRIPTION	PAC-SC30GRA
UNITS	Max No.Units	16 units/ 8 group
ON/OFF	Run and stop operation	✓
MODESELECTION	Switches betweenCool/Dry/Auto/Fan/Heat. Operation Mode will vary depending on the indoor unit. Auto mode is available with only R2 and WR2 systems	✓
TEMPERATURE SETTING	Sets the groups temperature control.Cool/Dry:19-30°C Heat:17-28°C Auto:19-28°C	✓
FAN SPEED SETTINGS	4 speed - Lo-Mi1-Mi2-Hi 2 speed - Lo-Hi	✓
AIR FLOW DIRECTION	Air Flow angles: 100°-80°-60°-40° and auto swing	✓
PERMIT/PROHIBIT FUNCTION	Run/Stop, Temperature Setting, Mode Selection and Filter Reset functions can be prohibited via a higher level system controller	✓
INDOOR RETURN AIR TEMPERATURE	Measures the intake temperature of the master unit within the group	✓
ERROR INDICATION	Displays a 4 digit code and the affected unit address	✓
VENTILATION INTERLOCK	Allows the group to be interlocked with a heat recovery Lossnay unit	✓

• Dimensions:130 x 120 x 19 mm

System example



Centralized Remote Controller

Central controller G-50A/GB-50A

Up to 50 units of packaged air conditioners can freely be monitored and operated!
Furthermore, it has enabled the Monitoring and Operation Via a Web Browser on a Personal Computer connected to it using a LAN or telephone line!



G-50A (with display)

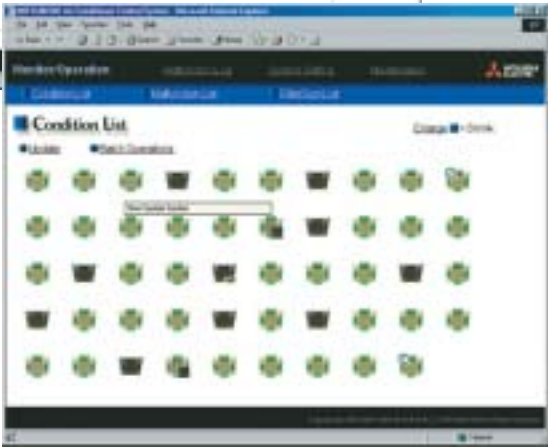
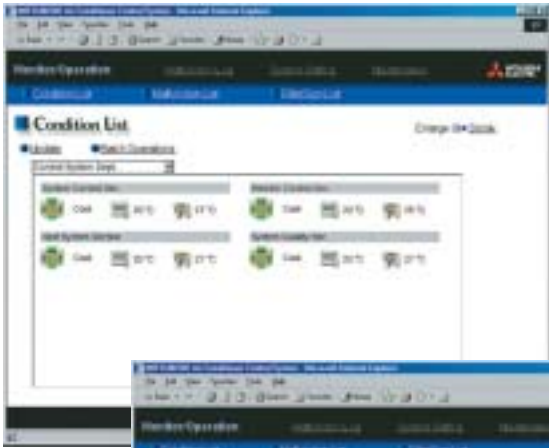
First in the industry
With Web Server
Functions!



GB-50A

- **Simple and Flexible**
This new generation controller is suitable for small to large systems with simple to complex functions available.
- **Web Browser**
Enables monitoring and operation of air conditioning units using a PC with Microsoft® Internet Explorer.
- **Remote Access**
Allows users to remotely monitor and operate the air conditioning units using a PC connected to a telephone line.
- **Auto Alarm**
In the case of any malfunction, necessary information will be sent to a mobile phone and/or personal computer by e-mail.
- **Easy to Upgrade**
Various new functions will be introduced gradually and can easily be down loaded into any existing G-50A/GB-50A.

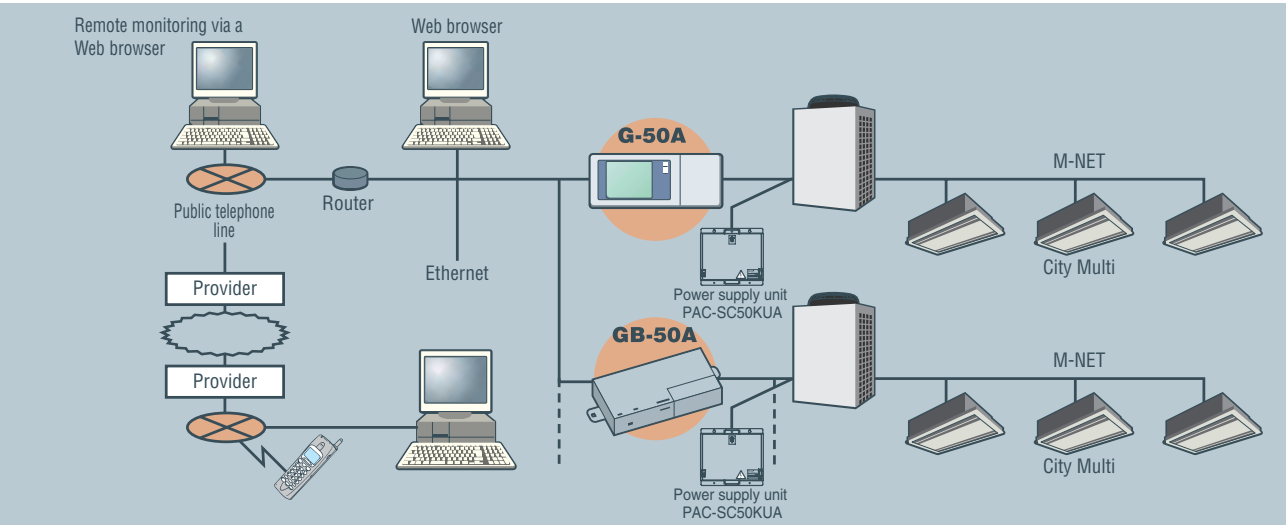
Example: Energy Monitoring
Demand Control
Annual Schedule



Example of display icons (air conditioner icons)

	Operation		In timer operation
	Stop		Lossnay on
	Occurrence of abnormality		Under energy-saving control
	Operation/ Occurrence of a filter sign		

System Structure



* Microsoft is a trademark or trademark of Microsoft corporation.

G50 Centralised Controller

FUNCTION	DESCRIPTION
MAX No.OFINDOOR UNITS	Up to 50 indoor units can be connected
ON/OFF	Run and Stop operation for a single group
MODE SELECTION	Switches between Cool/Dry/Auto/Fan/Heat.Operation Mode will vary depending on the indoor unit. Auto mode is available with only R2 and WR2 systems
TEMPERATURE SETTING	Sets the groups temperature control.Cool/Dry:19-30°C,Heat:17-28°C,Auto:19-28°C
FAN SPEED SETTING	4 speed:Lo-Mi1-Mi2-Hi,2 speed:Lo-Hi
AIR FLOW DIRECTION	Air Flow angles:100°-80°-60°-40° and auto swing
TIMER OPERATION	Maximum of 3 time sequences with 3 Start/Stop times per day for all groups can be allocated
PERMIT/PROHIBIT FUNCTION	Individual prohibit operations for each remote controller function (Run/Stop, Temperature Setting,Mode Selection and Filter Reset) can be activated
INDOOR RETURN AIR TEMPERATURE	Displays the measured intake temperature from each group
ERROR INDICATION	Displays a 4 digit code and the affected unit address.An error log is held showing the last 64 date stamped alarms
TEST RUN FUNCTION	Allows each unit within the group to operate in test mode
VENTILATION INTERLOCK	Allows the group to be interlocked with a heat recovery Lossnay unit
WEB SETPOINTLIMIT	Reduce the setpoint band of each individual unit (exp.23°C to 25°C)
WEB AUTOCHANGEOVER	Automatically switch heat pump outdoor unit to cooling or heating mode depending on the requirements
WEB INITIALSETTING	Commission the G50 from the web pages
WEB LOGIN	Two types of login available (Administrator & Guest).Administrator able to allow specific function access to guest
EXTERNAL INPUT/OUTPUT	Hardwired connections are available for : Inputs: Level Signal-Batch Start/Stop,Batch Emergency Stop Pulse Signal-Batch Start/Stop,Enable/Disable Local R/C Outputs: Start/Stop Status,Error/Normal Status
POWER SUPPLY UNIT	PAC-SC50KUA

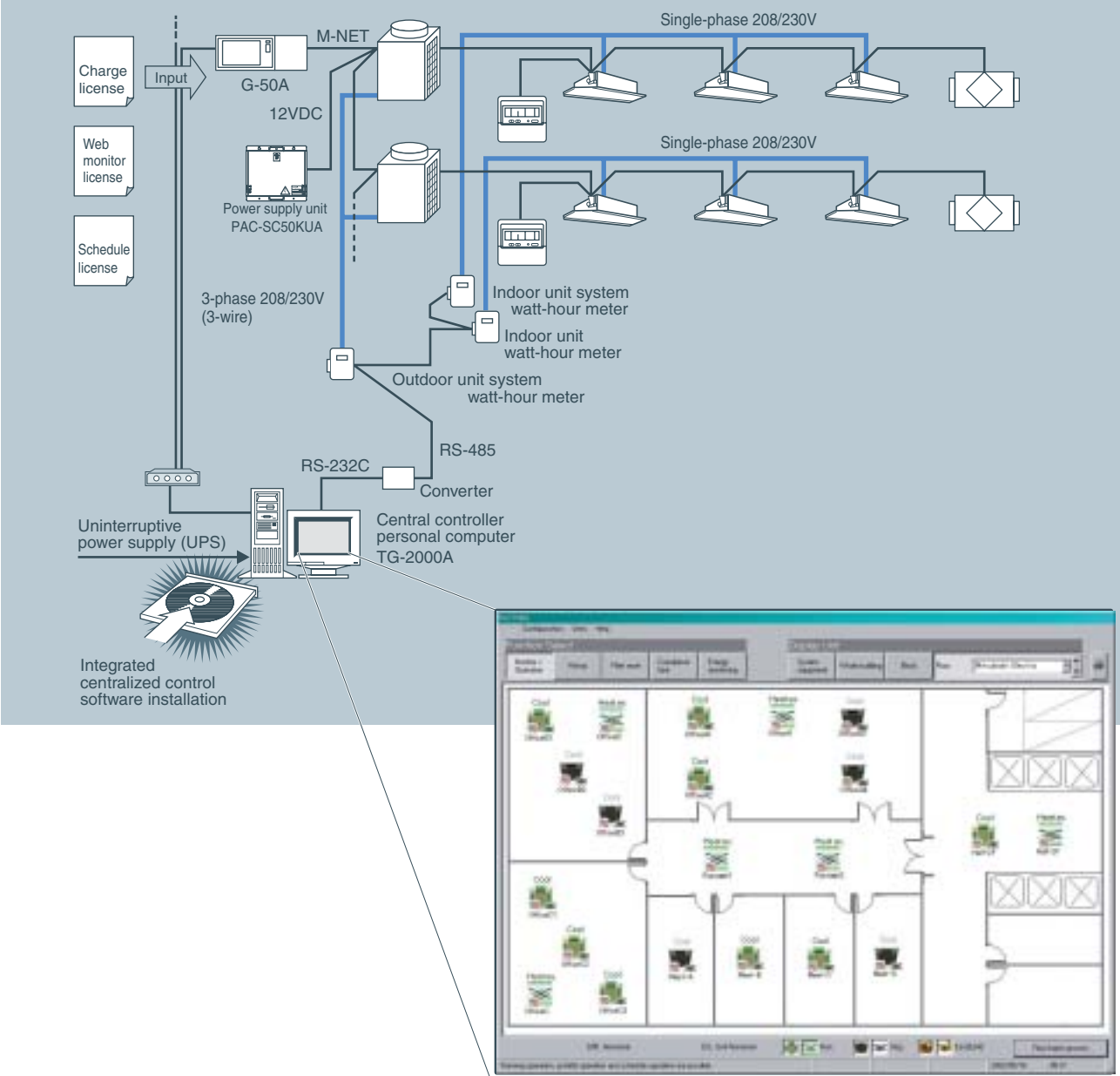
G50 Software Options

G50 -Web Monitor	Control and Monitor the G50 via Internet Explorer 5 or 6	G50 - Saving Energy	Energy Saving Capability
G50 - Email	Enable E-mail activation on fault conditions	G50 - Peak Cut	Peak Cut Control
G50 - Schedule	Weekly / Annual Scheduling and Night Set Back	G50 - Personal Web	Virtual Remote Controllers
G50 - Change	Energy Charge	G50 - BacNet	Bacnet interface

Centralized Remote Controller

Integrated centralized control software TG-2000A

Example of Basic System Configuration.

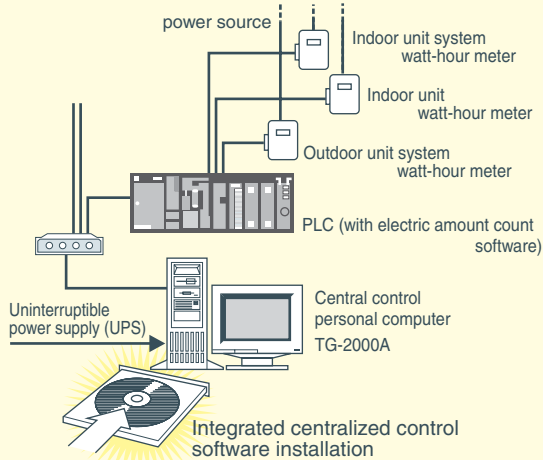


Main features of TG-2000A

- ① Up to 2000 indoor units (40 G-50A/GB-50A units) can be operated and monitored simultaneously.
- ② The air-conditioner layout can be displayed on the screen, making control and operation easier.
- ③ The annual and weekly schedules can be set. Two schedules, such as the summer master and winter master, can be saved in the weekly schedule.
- ④ Air-conditioning charges can be calculated based on the multiple air-conditioner usage results. The power apportionment percentage data and apportioned power rate can be calculated for each indoor unit using the power apportionment function, and can be output as a CSV format file. * Power apportionment charging is not possible with the old model, A control or K control.
 - Charging without WHM : The user manually inputs the power rate to calculate the air-conditioning charges. (Using a tool)
 - RS-485 WHM charging : The RS-485 WHM value is automatically tabulated to calculate the air-conditioning charges.
 - PLC + pulse WHM charging : The pulse output WHM value is automatically tabulated by the PLC to calculate the air-conditioning charges.
- ⑤ Energy saving operation is possible using the "ON/OFF", "set temperature change", "fan operation changeover" and "performance save operation (60% to 90%)" functions. Energy saving operation matching the amount of power in use is possible by using the PLC's electric amount count software.
- ⑥ Night set-back operation is possible with schedule settings. *1*4
- ⑦ General equipment can be operated and monitored. *2
- ⑧ General equipment can be schedule-controlled when using PAC-YG21CDA with PLC. For details of PLC refer to Installation Manual of PAC-YG21CDA. *3
 - *1: Compatible with TG-2000A Ver. 4.10 and higher, G-50A Ver. 2.51 and higher.
 - *2: Compatible with TG-2000A Ver. 4.30 and higher, G-50A Ver. 2.51 and higher.
 - *3: Compatible with TG-2000A Ver. 4.60 and higher, G-50A Ver. 2.70 and higher.
 - *4: With Night Set-Back function, the CITY MULTI system can run at heating mode with target temperature set to 12°C/54°F under schedule control. This function can protect the room from dropping down to extremely low temperature at mid-night.

Compatible with TG-2000A Ver. 4.10 and higher

* The electric amount count software or separately procured parts must be used with the designated PLC.



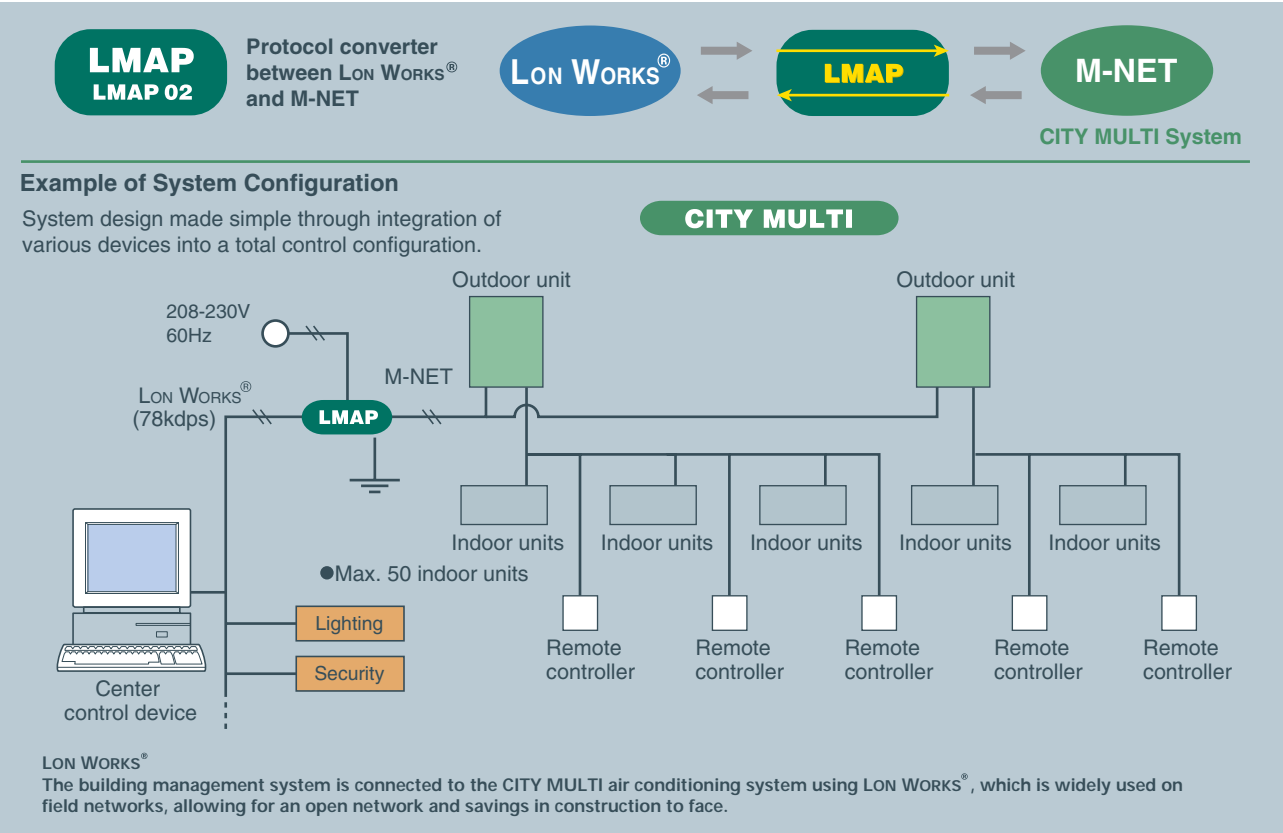
The TG-2000A can realize the following functions using the G-50A/GB-50A option (license).

- * Operation/monitor
- * Annual/weekly schedule
- * Charge
- * Energy saving *1
- * Peak cut *1
- *1: Compatible with TG-2000A Ver. 4.10 and higher, G-50A Ver. 2.51 or later.

LONWORKS® (LMAP02)

CITY MULTI can easily combine into a Building Management System (BMS) via the LonWorks™ and M-NET adapter LMAP02. LonWorks™ is an opened transmission protocol widely used at BMS, and related equipment control. CITY MULTI is therefore compatible with large-scaled BMS management via LonWorks™.

One LM ADAPTER unit can connect up to 50 Groups/50 indoor units.
Using a single LONWORKS adapter (LM ADAPTER), you can connect up to a maximum of 50 indoor units.



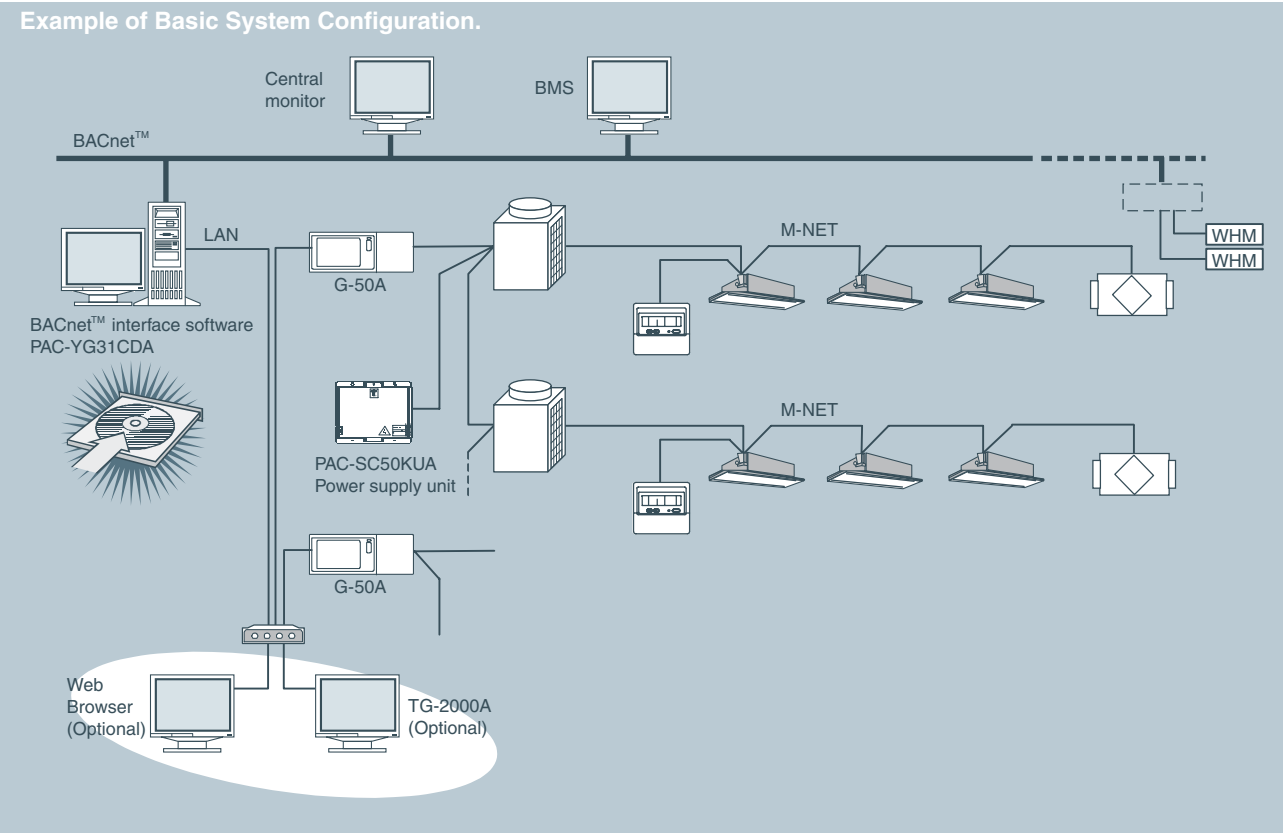
LON, LON WORKS® and the Echelon logo are trademarks of Echelon Corporation registered in the United States and other countries.

LONWORKS® INTERFACE		
FUNCTION	NETWORK VARIABLE	NETWORK VARIABLE
Control		
ON/OFF		Run/Stop
MODE OPERATION		Cooling/Drying/Heating/Auto/Fan
SETPOINT ADJUSTMENT		Cooling 19-30°C,Heating 17-28°C,Auto 19-28°C
FAN SPEED CONTROL		Lo-Mi1-Mi2-Hi
PERMIT / PROHIBIT		On/Off,Mode,Setpoint
FILTER DIRTY RESET		Normal/Reset
Monitoring		
ON/OFF		Run/Stop
MODE OPERATION		Cooling/Drying/Heating/Auto/Fan
SETPOINT ADJUSTMENT		Cooling 19-30°C,Heating 17-28°C,Auto 19-28°C
FAN SPEED CONTROL		Lo-Mi1-Mi2-Hi
PERMIT / PROHIBIT		On/Off,Mode,Setpoint
FAULT CODE		4 Character code - Indicates all unit alarms
FILTER SIGN		-
ROOM TEMPERATURE		-
THERMO		-

BACnet™ interface(PAC-YG31CDA)

MITSUBISHI ELECTRIC's CITYMULTI can be easily connect to the building management system through BACnet™. BACnet™ is the appropriate transmission method and used in many of the backbone networks and also it is easy to combine with other equipment corresponding to BACnet™.

One BACnet™ interface software manages up to 500 Groups/500 Indoor units. (10 G-50A/GB-50A units).




BACnet® INTERFACE

FUNCTION	NETWORK VARIABLE	NETWORK VARIABLE
Control		
ON/OFF		Run/Stop
MODE OPERATION		Cooling/Drying/Heating/Auto/Fan
SETPOINT ADJUSTMENT		Cooling 19-30°C,Heating 17-28°C,Auto 19-28°C
FAN SPEED CONTROL		Lo-Mi1-Mi2-Hi
PERMIT / PROHIBIT		On/Off,Mode,Setpoint
FILTER DIRTY RESET		Normal/Reset
Monitoring		
ON/OFF		Run/Stop
MODE OPERATION		Cooling/Drying/Heating/Auto/Fan
SETPOINT ADJUSTMENT		Cooling 19-30°C,Heating 17-28°C,Auto 19-28°C
FAN SPEED CONTROL		Lo-Mi1-Mi2-Hi
PERMIT / PROHIBIT		On/Off,Mode,Setpoint
AIRFLOW DIRECTION		Horizontal - 60°-80°-100° swing
FAULT CODE		4 Character code - Indicates all unit alarms
FILTER SIGN		-
ROOM TEMPERATURE		-



I ndoor unit



- Ceiling cassette type 4-way airflow
- Ceiling cassette type 2-way airflow
- Ceiling cassette type 1-way airflow
- Ceiling concealed type
- Ceiling suspended type
- Wall mounted type
- Floor standing type
-  Logsnay
- OA Processing Units

Wide selection of indoor units

Ceiling cassette (4way air flow)

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PLFY-P VAM-E





Model	P20	P25	P32	P40	P50
Capacity	2.2kW	2.8kW	3.6kW	4.5kW	5.6kW
Model	P63	P80	P100	P125	
Capacity	7.1kW	9.0kW	11.2kW	14.0kW	

Ceiling suspended

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PCFY-P VGM-E





Model	P40	P63	P100	P125
Capacity	4.5kW	7.1kW	11.2kW	14.0kW

Ceiling cassette (2way air flow)

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PLFY-P VLMD-E






Model	P20	P25	P32	P40	P50
Capacity	2.2kW	2.8kW	3.6kW	4.5kW	5.6kW
Model	P63	P71	P80	P100	P125
Capacity	7.1kW	8.0kW	9.0kW	11.2kW	14.0kW

Wall mounted

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PKFY-P VAM-E
PKFY-P VGM-E
PKFY-P VFM-E





Model	P20	P25	P32	P40	P50	P63	P100
Capacity	2.2kW	2.8kW	3.6kW	4.5kW	5.6kW	7.1kW	11.2kW

Ceiling cassette (1way air flow)

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PMFY-P VBM-E





Model	P20	P25	P32	P40
Capacity	2.2kW	2.8kW	3.6kW	4.5kW

Floor standing

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PFFY-P VLEM-E

PFFY-P VLRM-E




Model	P20	P25	P32	P40	P50	P63
Capacity	2.2kW	2.8kW	3.6kW	4.5kW	5.6kW	7.1kW

Ceiling concealed

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New

PEFY-P VMR-E-L/R




New


PDFY-P VM-E




PEFY-P VML-E



PEFY-P VMS-E



PEFY-P VMH-E





Model	P20	P25	P32	P40	P50	P63	P71
Capacity	2.2kW	2.8kW	3.6kW	4.5kW	5.6kW	7.1kW	8.0kW
Model	P80	P100	P125	P140	P200	P250	
Capacity	9.0kW	11.2kW	14.0kW	16.0kW	22.4kW	28.0kW	

Fresh Air Intake

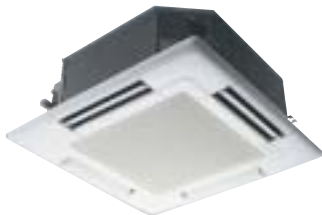
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PEFY-P VMH-E-F



Model	P80	P140	P200	P250
Capacity	9.0kW	16.0kW	22.4kW	28.0kW

INDOOR UNIT
Ceiling cassette type
4-way airflow
PLFY-P VAM-E

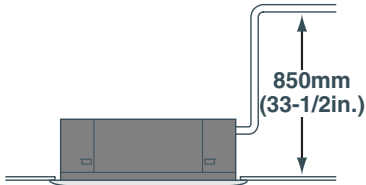


The new power cassette VAM offers 72 different airflow patterns, making it ideal for applications with ceilings up to 4.2 m(13-13/16ft) in height.



Easy Installation

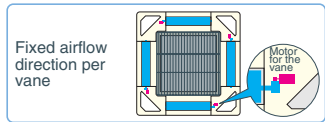
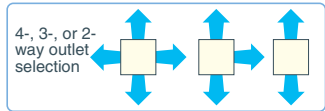
Drain water pipe lifted to 850mm(33-1/2in.)



Superb Features

First in the industry to offer 72 airflow patterns

The 72 different airflow patterns provide the best solution for varying room layouts and air-conditioning requirements. For extra versatility, you can also select from two-, three- or four-way outlets. What's more, the addition of separate motors to the individual vanes enables manual control that-together with remote control vane settings-make possible highly customized and flexible airflow patterns.



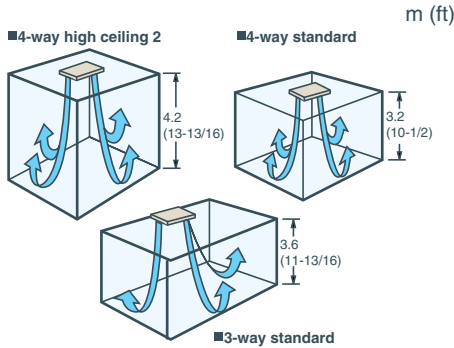
72 airflow patterns

*Optional air outlet shutter plate is necessary for two- or three-way airflow settings. The noise level may increase during two- or three-way airflow setup.

Outstanding Specifications

Wide-flow air outlet delivers a comforting breeze

The airflow of the VAM power cassette is powerful enough to warm atrium-type ceilings up to 4.2 m(13-13/16ft) in height.



	Power Cassette VAM		
	Standard	High ceiling 1	High ceiling 2
4-way	3.2	3.6	4.2
3-way	3.6	4.0	4.2
2-way	4.0	4.2	—

► Specifications

			PLFY-P32VAM-E	PLFY-P40VAM-E	PLFY-P50VAM-E	PLFY-P63VAM-E	PLFY-P80VAM-E	PLFY-P100VAM-E	PLFY-P125VAM-E	
Power source			~ 220-240V 50Hz / ~ 220-230V 60Hz							
Cooling capacity	※1	kW	3.6	4.5	5.6	7.1	9.0	11.2	14.0	
	※1	BTU/h	12,300	15,400	19,100	24,200	30,700	38,200	47,800	
	※2	kW	3.7	4.7	5.8	7.3	9.3	11.6	14.5	
	※2	kcal/h	3,150	4,000	5,000	6,300	8,000	10,000	12,500	
Heating capacity	※1	kW	4.0	5.0	6.3	8.0	10.0	12.5	16.0	
	※1	kcal/h	3,400	4,300	5,400	6,900	8,600	10,800	13,800	
	※1	BTU/h	13,600	17,100	21,500	27,300	34,100	42,700	54,600	
Power consumption	Cooling	kW	0.12	0.14		0.16	0.18	0.30	0.34	
	Heating	kW	0.12	0.14		0.16	0.18	0.30	0.34	
Current	Cooling	A	0.59	0.68		0.78	0.86	1.43	1.64	
	Heating	A	0.59	0.68		0.78	0.86	1.43	1.64	
External finish(Munsell No.)			Panel : 0.70Y 8.59/0.97							
Dimension H X W X D	※3	mm	258<30> X 840<950> X 840<950>						298 (30) X 840 (950) X 840 (950)	
		in.	10-3/16<1-3/16> X 33-1/8<37-7/16> X 33-1/8<37-7/16>						11-3/4<1-3/16> X 33-1/8<37-7/16> X 33-1/8<37-7/16>	
Net weight	※3	kg(lbs.)	22<5> (49<12>)				24<5> (53<12>)		32<5> (71<12>)	
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)							
Fan	Type		Turbo fan							
	Airflow rate (Low-Mid2-Mid1-High)	※3 m³/min	11-12-13-14	12-13-14-16		14-15-16-18	16-18-20-22	19-22-25-27	21-24-27-29	
		L/s	183-200-217-233	200-217-233-267		233-250-267-300	267-300-333-367	317-367-417-450	350-400-450-483	
		cfm	388-424-459-494	424-459-494-565		494-530-565-636	565-636-706-777	671-777-883-953	742-848-953-1024	
	External static pressure	Pa	0							
Motor	Type		Single phase induction motor							
	Output	kW	0.070						0.120	
Air filter			PP Honeycomb							
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (1/2)		ø12.7 (1/2) / ø15.88 (5/8) (Compatible)		ø15.88(5/8)		ø15.88 (5/8) / ø19.05 (3/4) (Compatible)	
	Liquid (Flare)	mm(in.)	ø6.35 (1/4)		ø6.35 (1/4) / ø9.52 (3/8) (Compatible)		ø9.52 (3/8)			
Drain pipe diameter		mm(in.)	O.D. 32 (1-1/4) <VP-25>							
Noise level (Lo-Mid2-Mid1-Hi) ※3 ※4			27-28-29-31	27-28-30-32		28-29-31-33	30-32-35-37	33-36-39-41	35-38-41-43	

Note:

※1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(80.6°F)DB/19°C(66.2°F)WB,Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB,Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB

※2 Cooling capacity indicates the maximum value at operation under the following condition
Cooling : Indoor 27°C(80.6°F)DB/19.5°C(67.1°F)WB,Outdoor 35°C(95°F)DB.
Heating : Indoor 21°C(69.8°F)DB,Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB

※3 External dimension/ net weight are shown in <unit/panel> , and airflow rate/noise level are in (low-middle2-middle1-high).

※4 It is measured in anechoic room.

INDOOR UNIT
Ceiling cassette type
2-way airflow
PLFY-P VLMD-E

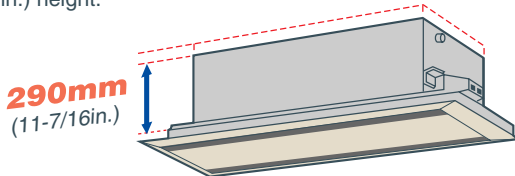


Slim body of 290mm(11-7/16in.) height.



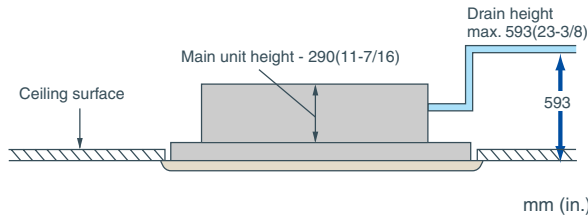
Slim body - only 290mm(11-7/16in.) height

The slimline body is highly suitable for installation in narrow ceiling spaces and for replacing obsolete air-conditioning equipment in older buildings. The main unit is only 290mm(11-7/16in.) height.



Equipped with drain water lift-up mechanism as standard

The drain can be positioned anywhere up to 600mm(23-5/8in.) from the ceiling's surface, providing greater freedom with long cross-piping and allowing more versatility with piping layouts.



Compact unit and low noise level attained!

Terminal block on outside of main unit makes wiring easier

Newly designed decorative panel with air flow switching and swing functions as a standard feature

Fresh air directly taken in

Fresh air can be taken in to the main unit directly (optional accessories needed).

Specifications

			PLFY-P20VLMD-E	PLFY-P25VLMD-E	PLFY-P32VLMD-E	PLFY-P40VLMD-E
Power source			~ 220-240V 50Hz / ~ 220-230V 60Hz			
Cooling capacity	※1	kW	2.2	2.8	3.6	4.5
	※1	BTU/h	7,500	9,600	12,300	15,400
	※2	kW	2.3	2.9	3.7	4.7
	※2	kcal/h	2,000	2,500	3,150	4,000
Heating capacity	※1	kW	2.5	3.2	4.0	5.0
	※1	kcal/h	2,200	2,800	3,400	4,300
	※1	BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling	kW	0.072 / 0.075	0.072 / 0.075	0.072 / 0.075	0.081 / 0.085
	Heating	kW	0.065 / 0.069	0.065 / 0.069	0.065 / 0.069	0.074 / 0.079
Current	Cooling	A	0.36 / 0.37	0.36 / 0.37	0.36 / 0.37	0.40 / 0.42
	Heating	A	0.30 / 0.32	0.30 / 0.32	0.30 / 0.32	0.34 / 0.37
External finish			Unit: Galvanizing Decoration Panel: ABS (0.7Y 8.59/0.97) Service Panel: Galvanizing (0.7Y 8.59/0.97)			
Dimension H X W X D		※3	mm	290<20> X 776<1,080> X 634<710>		
			in.	11-7/16<13/16> X 30-9/16<42-9/16> X 25<28>		
Net weight		※3	kg(lbs.)	23 <6.5> (51<15>)		24 <6.5> (53<15>)
Heat exchanger			Cross fin			
Fan	Type		Turbo fan X 1			
	Airflow rate (Lo-Mid-Hi)	m³/min	6.5-8.0-9.5			7.0-8.5-10.5
		L/s	108-133-158			117-142-175
		cfm	230-283-335			247-300-371
	External static pressure		Pa	0		
Motor	Type		Single phase induction motor			
	Output		0.015			
Air filter			PP honeycomb fabric (long life filter)			
Refrigerant pipe diameter	Gas(Flare)	mm(in.)	ø12.7 (1/2)			
	Liquid(Flare)	mm(in.)	ø6.35 (1/4)			
Drain pipe diameter		mm(in.)	O.D.32 (1-1/4)			
Noise level (Lo-Mid-Hi) ※4	220V/240V	dB(A)	27-30-33			29-33-36
	230V	dB(A)	28-31-34			30-34-37

			PLFY-P50VLMD-E	PLFY-P63VLMD-E	PLFY-P80VLMD-E	PLFY-P100VLMD-E	PLFY-P125VLMD-E
Power source			~ 220-240V 50Hz / ~ 220-230V 60Hz				
Cooling capacity	※1	kW	5.6	7.1	9.0	11.2	14.0
	※1	BTU/h	19,100	24,200	30,700	38,200	47,800
	※2	kW	5.8	7.3	9.3	11.6	14.5
	※2	kcal/h	5,000	6,300	8,000	10,000	12,500
Heating capacity	※1	kW	6.3	8.0	10.0	12.5	16.0
	※1	kcal/h	5,400	6,900	8,600	10,800	13,800
	※1	BTU/h	21,500	27,300	34,100	42,700	54,600
Power consumption	Cooling	kW	0.082 / 0.086	0.101 / 0.105	0.147 / 0.156	0.157 / 0.186	0.28 / 0.28
	Heating	kW	0.075 / 0.080	0.094 / 0.099	0.140 / 0.150	0.150 / 0.180	0.27 / 0.27
Current	Cooling	A	0.41 / 0.43	0.49 / 0.51	0.72 / 0.74	0.75 / 0.88	1.35 / 1.35
	Heating	A	0.35 / 0.38	0.43 / 0.46	0.66 / 0.69	0.69 / 0.83	1.33 / 1.33
External finish			Unit: Galvanizing Decoration Panel: ABS (0.7Y 8.59 / 0.97) Service Panel: Galvanizing (0.7Y 8.59 / 0.97)				
Dimension H × W × D		※3	mm	290<20> × 946<1,250> × 634<710>		290<20> × 1,446<1,750> × 634<710>	
			in.	11-7/16<13/16> × 37-1/4<49-1/4> × 25<28>		11-7/16<13/16> × 56-15/16<68-15/16> × 25<28>	
Net weight		※3	kg(lbs.)	27 <7.5> (60<17>)	28 <7.5> (62<17>)	44 <12.5> (98<28>)	47 <12.5> (104<28>)
Heat exchanger			Cross fin				
Fan	Type		Turbo fan × 1		Turbo fan × 2		Sirocco fan × 4
	Airflow rate	m ³ /min	9.0-11.0-12.5	10.0-13.0-15.5	15.5-18.5-22.0	17.5-21.0-25.0	24.0-27.0-30.0-33.0
	(P50-P100:Lo-Mid-Hi)	L/s	150-183-208	167-217-258	258-308-367	292-350-417	400-450-500-550
	(P125:Lo-Mid2-Mid1-Hi)	cfm	318-388-441	353-459-547	547-653-777	618-742-883	848-953-1,059-1,165
	External static pressure		Pa	0			
Motor		Type	Single phase induction motor				
		Output	kW		0.020	0.020 (at 240V)	0.030 (at 240V)
Air filter			PP honeycomb fabric (long life filter)				
			Synthetic fiber unwoven cloth filter (long life)				
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (1/2)	ø15.88 (5/8)			ø15.88 (5/8)
	Liquid (Flare)	mm(in.)	ø 6.35 (1/4)	ø9.52 (3/8)			
Drain pipe diameter		mm(in.)	O.D.32 (1-1/4)				
Noise level	220V,240V	dB(A)	31-34-37	32-37-39	33-36-39	36-39-42	40-42-44-46
(Lo-Mid-Hi)※4	230V	dB(A)	32-35-38	33-38-40	34-37-40	37-41-43	(Lo-Mid2-Mid1-Hi)

Note:

- ※1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(80.6°F)DB/19°C(66.2°F)WB,Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB,Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB
- ※2 Cooling capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(80.6°F)DB/19.5°C(97.1°F)WB,Outdoor 35°C(95°F)DB
Heating : Indoor 21°C(69.8°F)DB,Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB
- ※3 The figure in < > indicates panel's
- ※4 It is measured in anechoic room.

INDOOR UNIT
Ceiling cassette type
1-way airflow
PMFY-P VBM-E



Compact and lightweight body perfect for limited ceiling space applications.



Compact size for smooth installation and maintenance

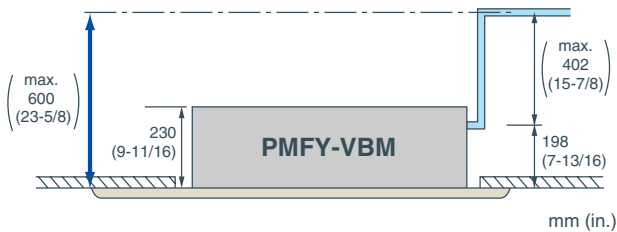
Unit body size has been standardized for all models at 854mm for easier installation. Body weight is only 14kg for the main unit and 3kg for the panel, making this unit one of the lightest in the industry.

Quiet operation

Newly developed airflow control technology reduces noise level to only 27dB (P20VBM) for industry-leading quiet operation.

Drain lift-up mechanism

The drain can be positioned anywhere up to 600mm(23-5/8in.) from the ceiling's surface.



Specifications

			PMFY-P20VBM-E	PMFY-P25VBM-E	PMFY-P32VBM-E	PMFY-P40VBM-E
Power source			~ 220-240V 50Hz / ~ 220V 60Hz			
Cooling capacity	※1	kW	2.2	2.8	3.6	4.5
	※1	BTU/h	7,500	9,600	12,300	15,400
	※2	kW	2.3	2.9	3.7	4.7
	※2	kcal/h	2,000	2,500	3,150	4,000
Heating capacity	※1	kW	2.5	3.2	4.0	5.0
	※1	kcal/h	2,200	2,800	3,400	4,300
	※1	BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling	kW	0.042	0.044		0.054
	Heating	kW	0.042	0.044		0.054
Current	Cooling	A	0.20	0.21		0.26
	Heating	A	0.20	0.21		0.26
External finish			Panel : 0.98Y8.99/0.63			
Dimension H X W X D		※3	mm(in.) 230<30> X 812<1,000> X 395<470> (9-1/16<1-3/16> X 32<39-3/8> X 15-9/16<18-9/16>)			
Net weight			kg(lbs.) 14 <3.0> (31<7>)			
Heat exchanger		※3	Cross fin (Aluminum plate fin and copper tube)			
Fan	Type		Line flow fan X 1			
	Airflow rate (Low-Mid2-Mid1-High)	※3	m³/min	6.5-7.2-8.0-8.7	7.3-8.0-8.6-9.3	7.7-8.7-9.7-10.7
			L/s	108-120-133-145	122-133-143-155	128-145-162-178
			cfm	230-254-283-307	258-283-304-328	272-307-343-378
External static pressure			Pa 0			
Motor	Type		Single phase induction motor			
	Output		kW 0.028			
Air filter			PP Honeycomb fabric			
Refrigerant	Gas(Flare)	mm(in.)	ø12.7 (1/2)			
pipe diameter	Liquid(Flare)	mm(in.)	ø6.35 (1/4)			
Drain pipe diameter			mm(in.) O.D. 25 (1) <VP-20>			
Noise level (Lo-Mid2-Mid1-Hi)		※4	dB(A) 27-30-33-35	32-34-36-37	33-35-37-39	

Note:

- ※1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(80.6°F)DB/19°C(66.2°F)WB, Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB, Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB
- ※2 Cooling capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(80.6°F)DB/19.5°C(67.1°F)WB, Outdoor 35°C(95°F)DB
Heating : Indoor 21°C(69.8°F)DB, Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB
- ※3 External dimension / net weight are shown in <panel>, and airflow rate/noise level are in (low-middle2-middle1-high).
- ※4 It is measured in anechoic room.

INDOOR UNIT
Ceiling concealed
type

PEFY-P VMR-E-L/R

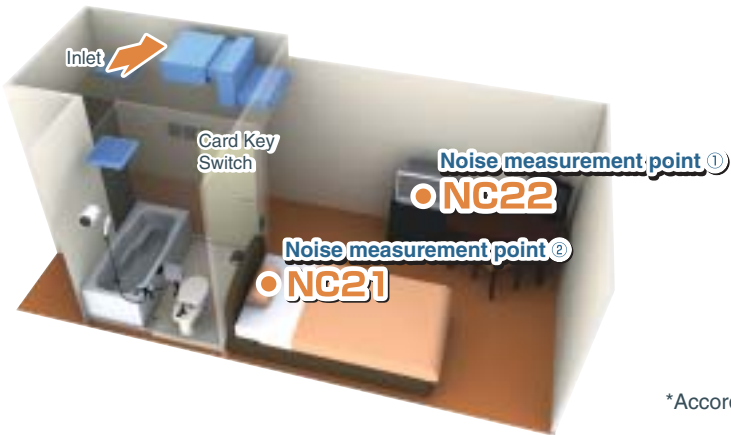
Static Presure
5Pa

Width
640mm
25-6/32in.

Ultra
Low Noise

Piping connection
L model
R model

Problem solver for residential hotels, museums, libraries,
or hospitals where low noise is especially a must!



Operable by card key switch

Prepared a contact for a card key. It's possible to operate / stop
by taking a card key in and out.

Enables to install for symmetric design room

Both of Left piping / Right piping, control box, are available.
It's selectable for layout of each room.
Plus easy maintenance from the access door in the prefabrica-
ted bath.
*Seen from an anterior view, the pipe and control box are on
the right side of -R type.

New



*According to the data measured in Mitsubishi Electric laboratory

Ultra low noise

Realizing the low level noise that is NC21 around a bed and
N22 around a desk when the high notch.
It contributes to create a quiet indoor environment.
*Outlet is elbow-constructed using a glass wool duct.
The noise level is changed by the room size or the setting con-
dition of the unit.

Energy-saving by prevention of forgetting the switch off

Compact & Simple operation remote controller is available.
*This remote controller can operate only start / stop, indoor tem-
perature control and wind speed control. Centralized remote
controller must be used together.
Enables a prevention to forget the switch in a vacant room off
by the centralized remote controller like G-50.

Specifications

			PEFY-P20VMR-E-L	PEFY-P25VMR-E-L	PEFY-P32VMR-E-L
Power source			1-phase 220/230/240V 50Hz 220/230V 60Hz		
Cooling capacity	*1	kW	2.2	2.8	3.6
		BTU/h	7,500	9,600	12,300
	*2	kW	2.3	2.9	3.7
		kcal/h	2,000	2,500	3,150
Heating capacity	*1	kW	2.5	3.2	4.0
		kcal/h	2,200	2,800	3,400
	*1	BTU/h	8,500	10,900	13,600
Power consumption	Cooling	kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
	Heating	kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
Current	Cooling	A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
	Heating	A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
External finish			Galvanized		
Dimension H × W × D		mm	292 × 640 × 580		
		in.	-		
Net weight *3		kg(lbs.)	18 (40)		
Heat exchanger			Cross fin (Aluminum fin and copper tube)		
Fan	Type		Sirocco fan × 1		
	Airflow rate (Lo-Mid2-Mid1-Hi)	m³/min	4.8-5.8-7.9		4.8-5.8-9.3
	External static pressure *3	Pa	5		
Motor	Type		1-phase induction motor		
	Output	kW	0.018		0.023
Air filter			PP Honeycomb fabric (washable)		
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø6.35 (1/4)		
	Liquid (Flare)	mm(in.)	ø12.7(1/2)		
Drain pipe diameter		mm(in.)	O.D. 26 (1)		
Noise level (Lo-Mid-Hi) *4	220V	dB(A)	20-25-30		20-25-33
	230V		21-26-32		21-26-35
	240V		22-27-30		22-27-33

			PEFY-P20VMR-E-R	PEFY-P25VMR-E-R	PEFY-P32VMR-E-R
Power source			1-phase 220/230/240 V 50Hz 220/230V 60Hz		
Cooling capacity	*1	kW	2.2	2.8	3.6
		BTU/h	7,500	9,600	12,300
	*2	kW	2.3	2.9	3.7
		kcal/h	2,000	2,500	3,150
Heating capacity	*1	kW	2.5	3.2	4.0
		kcal/h	2,200	2,800	3,400
	*1	BTU/h	8,500	10,900	13,600
Power consumption	Cooling	kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
	Heating	kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
Current	Cooling	A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
	Heating	A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
External finish			Galvanized		
Dimension H × W × D		mm	292 × 640 × 580		
		in.	-		
Net weight *3		kg(lbs.)	18 (40)		
Heat exchanger			Cross fin (Aluminum fin and copper tube)		
Fan	Type		Sirocco fan × 1		
	Airflow rate (Lo-Mid2-Mid1-Hi)	m³/min	4.8-5.8-7.9		4.8-5.8-9.3
	External static pressure *3	Pa	5		
Motor	Type		1-phase induction motor		
	Output	kW	0.018		0.023
Air filter			PP Honeycomb fabric (washable)		
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø6.35 (1/4)		
	Liquid (Flare)	mm(in.)	ø12.7 (1/2)		
Drain pipe diameter		mm(in.)	O.D. 26(1)		
Noise level (Lo-Mid-Hi) *4	220V	dB(A)	20-25-30		20-25-33
	230V		21-26-32		21-26-35
	240V		22-27-30		22-27-33

Note:

- *1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C (81°F) DB/19°C (66°F) WB, Outdoor 35°C (95°F) DB
Heating : Indoor 20°C (68°F) DB, Outdoor 7°C (45°F) DB/6°C (43°F) WB
- *2 Cooling capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C (80.6°F) DB/19.5°C (67.1°F) WB, Outdoor 35°C (95°F) DB
Heating : Indoor 21°C (69.8°F) DB, Outdoor 7°C (44.6°F) DB/6°C (42.8°F) WB
- *3 The external static pressure is set to 100Pa (at 220V) / 150Pa (at 230, 240V) at factory shipment.
- *4 Measured in anechoic room. Noise levels of the unit with a rear air inlet. (Noise levels are higher than the unit with a bottom air inlet.)

INDOOR UNIT
Ceiling concealed
type

PEFY-P VMS-E

Static Presure
5~50Pa

Height
200mm
7-28/32in.

Low Noise

Width
900mm
35-14/32in.

Increased design flexibility for the places where low noise operation is especially needed from an ultra thin body.

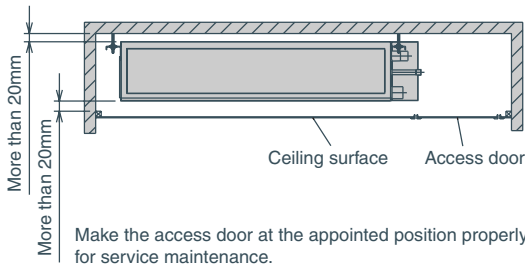


- Changeable static pressure
(4 stage 5-15-35-50Pa)
- Changeable air flow rate
(3 stage low-middle-high)
- Drain lift-up pump is attached
as standard.
- Filter is attached as standard.



Ultra low height unit with 200mm (7-28/32in.) high

Can be installed easily in tight spaces, such as ceiling cavities or drop-ceilings.



Reduced noise thanks to the use of newly designed centrifugal fan and coil

Noise level table (Standard static pressure)

		dB(A)			
Noise Level	Capacity		P20	P25	P32
	Fan Speed	High	27	27	30
		Mid	25	25	28
		Low	22	22	25

► Specifications

		PEFY-P20VMS-E		PEFY-P25VMS-E		PEFY-P32VMS-E		PEFY-P40VMS-E		PEFY-P50VMS-E		PEFY-P63VMS-E	
Power source		1-phase 220-240V 50Hz 1-phase 220-230V 60Hz											
Cooling capacity	*1 kW	2.2		2.8		3.6		4.5		5.6		7.1	
	*1 BTU/h	7,500		9,600		12,300		5.0		6.3		8.0	
	*2 kW	2.3		2.9		3.7		4.7		5.8		7.3	
	*2 kcal/h	2,000		2,500		3,150		4,000		5,000		6,300	
Heating capacity	*1 kW	2.5		3.2		4.0		5.0		6.3		8.0	
	*1 kcal/h	2,200		2,800		3,400		4,300		5,400		6,900	
	*1 BTU/h	8,500		10,900		13,600		17,100		21,500		27,300	
Power input	kW	0.08	0.06	0.08	0.06	0.09	0.07	0.11	0.09	0.13	0.11	0.14	0.12
Current	A	0.39	0.28	0.39	0.28	0.44	0.33	0.53	0.42	0.63	0.52	0.68	0.57
Fan ※3	Type X Quantity	Sirocco fan X 3											
	External static press	Pa		5-15-35-50									
	Motor type	DC brushless motor											
	Motor output	kW		0.096									
	Airflow rate(Lo-Mid-Hi)	m³/min		6-7-8		7.5-8.5-10		8-9.5-11		9.5-11-13		12-14-16.5	
External finish		Galvanized											
External dimension H X W X D	mm	200 X 900 X 700										200 X 1100 X 700	
	In.	7-7/8 X 35-7/16 X 27-9/16										7-7/8 X 43-5/16 X 27-9/16	
Net weight	kg	23						24					
Refrigerant piping diameter	Liquid	mm(in.)		ø6.35 (ø1/4)		Brazed		ø6.35 (ø1/4)		Brazed		ø9.52 (ø3/8) Brazed	
	Gas	mm(in.)		ø12.7 (ø1/2)		Brazed		ø12.7 (ø1/2)		Brazed		ø15.88 (ø5/8) Brazed	
Drain piping diameter	mm(in.)	O.D. 32 (1-1/4)											
Noise level (Lo-Mid-Hi) (measured in anechoic room)	dB<A>	22-25-27				25-28-30		28-30-33		30-32-35		30-33-36	
Air filter		PP Honeycomb fabric (washable)											
Heat exchanger		Cross fin (Aluminium fin and copper tube)											

Note:

- *1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor : 27°C DB/19°C WB. (81°F DB. / 66°F WB.) Outdoor : 35°C DB. (95°F DB.)
Heating : Indoor : 20°C DB. (68°F DB.) Outdoor : 7°C DB. / 6°C WB. (45°F DB. / 43°F WB.)
Pipe length : 7.5m (24-9/16ft) Height difference : 0m (0ft)
- *2 Cooling Indoor: 27°C(80.6°F)DB/19.5°C(67.1°F)WB, Outdoor: 35°C(95°F)DB
Heating Indoor: 21°C(69.8°F)DB, Outdoor: 7°C(44.6°F)DB/6°C(42.8°F)WB
- *3 The external static pressure is set to 15 Pa at factory shipment.

INDOOR UNIT
Ceiling Concealed Type

PDFY-P VM-E

Static Pressure
30~100(130)Pa

Achieving creative air conditioning design through a rich array of system materials.



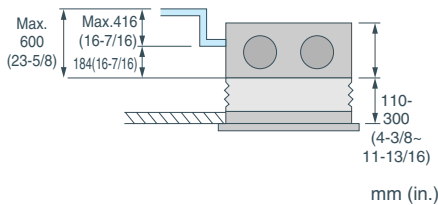
Air outlet side compatible with a variety of ducts (optional)

Adjustable setting of external static pressure to meet system configuration and installation conditions

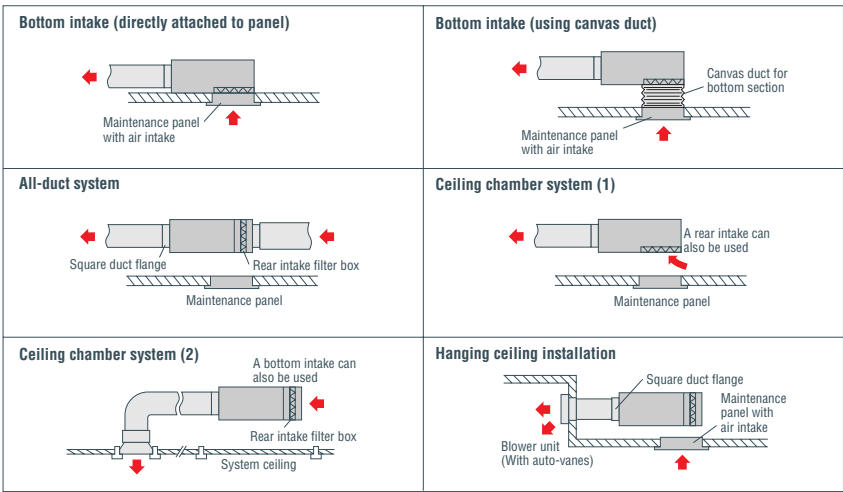
Static pressure settings can be increased to adjust to all kinds of ducts as well as functional upgrade option (high performance filter etc). An increase from the standard 50Pa to 130 Pa is possible to cope with various layout configurations.

*For P100~P125

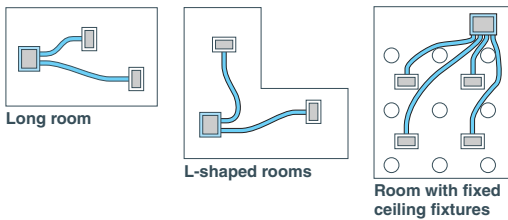
Slim 295mm main unit with optional drain up mechanism ensures up to 600 mm(23-5/8in.) of lift



Multiple installation patterns for assorted applications and locations



Flexible installation for a variety of layouts



► Specifications

			PDFY-P20VM-E	PDFY-P25VM-E	PDFY-P32VM-E	PDFY-P40VM-E	PDFY-P50VM-E
Power source			~ 220-240V 50Hz / ~ 220V 60Hz				
Cooling capacity	*1	kW	2.2	2.8	3.6	4.5	5.6
	*1	BTU/h	7,500	9,600	12,300	15,400	19,100
	*2	kW	2.3	2.9	3.7	4.7	5.8
	*2	kcal/h	2,000	2,500	3,150	4,000	5,000
Heating capacity	*1	kW	2.5	3.2	4.0	5.0	6.3
	*1	BTU/h	8,500	10,900	13,600	17,100	21,500
	*2	kW	2.6	3.3	4.1	5.2	6.5
	*2	kcal/h	2,250	2,800	3,550	4,500	5,600
Power consumption (50/60Hz)	Cooling	kW	0.11 / 0.12			0.13 / 0.15	
	Heating	kW	0.11 / 0.12			0.13 / 0.15	
Current	Cooling	A	0.53 / 0.58			0.60 / 0.71	
	Heating	A	0.53 / 0.58			0.60 / 0.71	
External finish			Galvanizing				
Dimension H × W × D	mm		295 × 710 × 735			295 × 960 × 735	
	in.		11-5/8 × 28 × 28-15/16			11-5/8 × 37-13/16 × 28-15/16	
Net weight	kg(lbs)		25.5 (57)		27 (60)	32 (71)	34 (75)
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)				
Fan	Type		Sirocco fan × 1			Sirocco fan × 2	
	Airflow rate (Lo-Mid2-Mid1-Hi)	m³/min	6.0-6.5-7.5-8.5			10.0-11.0-12.5-14.0	
	External static pressure ※3	Pa	30 / 50 / 100				
Motor	Type		Single phase induction motor				
	Output ※4	kW	0.075 (at 240V)				
Air filter ※5			Synthetic fiber unwoven cloth filter (long life)				
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (1/2)				ø12.7 (1/2)
	Liquid (Flare)	mm(in.)	ø6.35 (1/4)				ø6.35 (1/4)
Drain pipe diameter		mm(in.)	O.D. 32 (1-1/4) <VP-25>				
Noise level (Lo-Mid2-Mid1-Hi) ※6			dB(A) 28-30-33-36			34-36-37-39	

			PDFY-P63VM-E	PDFY-P71VM-E	PDFY-P80VM-E	PDFY-P100VM-E	PDFY-P125VM-E
Power source			~ 220-240V 50Hz / ~ 220V 60Hz				
Cooling capacity	*1	kW	7.1	8.0	9.0	11.2	14.0
	*1	BTU/h	24,200	27,300	30,700	38,200	47,800
	*2	kW	7.3	8.3	9.3	11.6	14.5
	*2	kcal/h	6,300	7,100	8,000	10,000	12,500
Heating capacity	*1	kW	8.0	9.0	10.0	12.5	16.0
	*1	BTU/h	27,300	30,700	34,100	42,700	54,600
	*2	kW	8.3	9.3	10.5	13.0	16.3
	*2	kcal/h	7,100	8,000	9,000	11,200	14,000
Power consumption	Cooling	kW	0.14 / 0.17	0.15 / 0.18	0.17 / 0.21	0.27-0.31 / 0.29	0.33-0.38 / 0.39
	Heating	kW	0.14 / 0.17	0.15 / 0.18	0.17 / 0.21	0.27-0.31 / 0.29	0.33-0.38 / 0.39
Current	Cooling	A	0.68 / 0.82	0.72 / 0.88	0.82 / 1.01	1.28-1.34 / 1.36	1.55-1.63 / 1.84
	Heating	A	0.68 / 0.82	0.72 / 0.88	0.82 / 1.01	1.28-1.34 / 1.36	1.55-1.63 / 1.84
External finish			Galvanizing				
Dimension H × W × D	mm		295 × 1,160 × 735			335 × 1,510 × 775	
	in.		11-5/8 × 45-11/16 × 28-15/16			13-1/4 × 59-1/2 × 30-9/16	
Net weight		kg(lbs)	39 (86)			52 (115)	
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)				
Fan	Type		Sirocco fan × 2				
	Airflow rate (Lo-Mid2-Mid1-Hi)	m³/min	12.5-14.0-16.0-18.0	13.5-15.5-17.5-19.5	14.5-16.5-18.5-21.0	19.5-28.0 (Lo-Hi)	24.0-34.0 (Lo-Hi)
	External static pressure ※3	Pa	30 / 50 / 100			50 / 100 / 130	
Motor	Type		Single phase induction motor				
	Output ※4	kW	0.078 (at 240V)			0.140 (at 240V)	0.190 (at 240V)
Air filter			Synthetic fiber unwoven cloth filter (long life)				
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø15.88 (5/8)			ø 15.88 (5/8)	
	Liquid (Flare)	mm(in.)	ø9.52 (3/8)				
Drain pipe diameter		mm(in.)	O.D. 32 (1-1/4) <VP-25>				
Noise level (Lo-Mid2-Mid1-Hi) ※6		dB(A)	30-34-36-39	32-35-37-40	34-37-40-42	34-42 (37-44) ※5	40-45 (42-46) ※5

Note:

Cooling/heating capacity indicates the maximum value at operation under the following condition.

*1 Cooling Indoor: 27°C(80.6°F)DB/19°C(66.2°F)WB, Outdoor: 35°C(95°F)DB
Heating Indoor: 20°C(68°F)DB, Outdoor: 7°C(44.6°F)DB/6°C(42.8°F)WB

*2 Cooling Indoor: 27°C(80.6°F)DB/19.5°C(67.1°F)WB, Outdoor: 35°C(95°F)DB
Heating Indoor: 21°C(69.8°F)DB, Outdoor: 7°C(44.6°F)DB/6°C(42.8°F)WB

*3 The external static pressure is set to 50Pa at factory shipment.

*4 The value for Models 20-80 are that at the external static pressure of 100Pa, while the value for Models 100-125 are that at the external static pressure of 130Pa.

*5 The figure in () indicates noise level at 240V/50Hz.

*6 It is measured in anechoic room.

PEFY-P VML-E

Static Presure
5Pa

Width
720mm
28-11/32in.

Increased design flexibility for hotel and residential use from an thin body.



Low static pressure (5Pa) meets an application requiring direct air flow

Changeable air flow rate (3 stage low-middle-high)

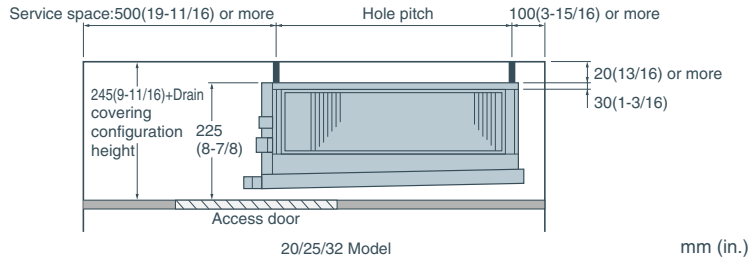
Flexible installation by rear or bottom return air inlet.

Filter is attached as standard.



Low height unit with 225mm(8-7/8in.) high

Can be installed easily in tight spaces, such as ceiling cavities or drop-ceilings.
Notes: Drain lift-up pump not applicable.



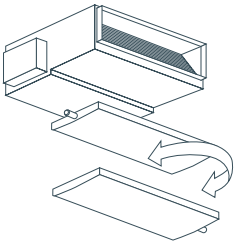
Reduced noise thanks to the use of newly designed centrifugal fan

Noise level table		dB(A)			
Noise Level	Fan Speed	Capacity	P20	P25	P32
		High	36	36	40
		Mid	29	29	29
		Low	25	25	25

Note: In the case of bottom inlet, the operating noise is louder than in the case of rear inlet.

Drainage lines may be connected on either the right or left side.

Perfect for use in hotels and other places where line placement is a problem.



Specifications

			PEFY-P20VML-E		PEFY-P25VML-E		PEFY-P32VML-E		
Power source			~ 220-240V 50Hz / 60Hz						
Cooling capacity	*1	kW	2.2		2.8		3.6		
	*1	BTU/h	7,500		9,600		12,300		
	*2	kW	2.3		2.9		3.7		
	*2	kcal/h	2,000		2,500		3,150		
Heating capacity	*1	kW	2.5		3.2		4.0		
	*1	kcal/h	2,200		2,800		3,400		
	*1	BTU/h	8,500		10,900		13,600		
Power consumption (50/60Hz)	Cooling	kW	0.05 / 0.06			0.07 / 0.09			
	Heating	kW	0.05 / 0.06			0.07 / 0.09			
Current	Cooling	A	0.24 / 0.28			0.32 / 0.42			
	Heating	A	0.24 / 0.28			0.32 / 0.42			
External finish			Galvanizing						
Dimension H × W × D		mm	225 × 720 × 550						
		in.	8-7/8 × 28-3/8 × 21-11/16						
Net weight		kg(lbs.)	18 (40)						
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)						
Fan	Type		Sirocco fan × 1						
	Airflow rate (Lo-Mid-Hi)	m³/min	4.8-5.8-7.9				4.8-5.8-9.5		
		L/s	80-97-132				80-97-158		
		cfm	170-205-279				170-205-335		
	External static pressure		Pa	5					
Motor	Type		Single phase induction motor						
	Output		kW	0.023			0.032		
Air filter			PP Honeycomb fabric (washable)						
Refrigerant pipe diameter	Gas (Brazing)	mm(in.)	ø12.7 (1/2)						
	Liquid (Brazing)	mm(in.)	ø6.35 (1/4)						
Drain pipe diameter			R1 (External thread)						
Noise level (Lo-Mid-Hi) ±5		dB(A)	25-29-36				25-29-40		

Note:

- Cooling/heating capacity indicates the maximum value at operation under the following condition.
- *1 Cooling/heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor: 27°C(80.6°F)DB/19°C(66.2°F)WB, Outdoor: 35°C(95°F)DB
Heating Indoor: 20°C(68°F)DB, Outdoor: 7°C(44.6°F)DB/6°C(42.8°F)WB
- *2 Cooling capacity indicates the maximum value at operation under the following condition.
Cooling Indoor: 27°C(80.6°F)DB/19.5°C(67.1°F)WB, Outdoor: 35°C(95°F)DB
Heating Indoor: 21°C(69.8°F)DB, Outdoor: 7°C(44.6°F)DB/6°C(42.8°F)WB
- *3 The external static pressure is set to 100Pa (at 220V) /150Pa (at 230, 240V) at factory shipment.
- *4 The value are that at 240V.
- *5 It is measured in anechoic room.

PEFY-P VMH-E

Static Pressure
100~200(260)Pa

Increased design flexibility from sufficient external static pressure allow authentic duct air- conditioning with an elegant interior layout.



Maximum external static pressure 200Pa

The additional external static pressure capacity provides flexibility for duct extension, branching and air outlet configuration.

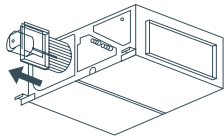
		P40	P50	P63	P71	P80	P100	P125	P140	P200	P250
External static pressure (Pa)	220V	50/100/200									—
	230/240V	100/150/200									—
	380V	—									110/220
	400/415V	—									130/260

Reduced noise thanks to the use of newly designed centrifugal fan

Noise level table (Standard static pressure 220V)										dB(A)	
Noise Level	Capacity		P40	P50	P63	P71	P80	P100	P125	P140	
	Fan Speed	High	34	34	38	39	41	42	42	42	
		Low	27	27	32	32	35	34	34	34	

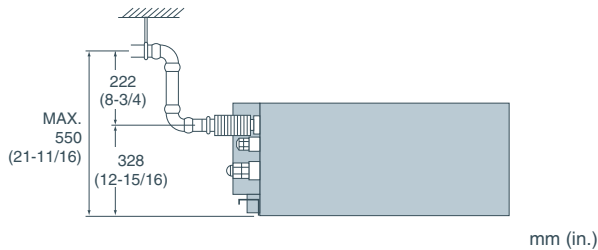
One-side maintenance

All maintenance to the unit, including fan inspection and fan motor removal, can be conducted from the inspection opening on one side.



Drain up mechanism (option) ensures up to 550mm (21-11/16in.) of lift

The introduction of an upper drain mechanism allows the drain connection to be raised as high as 550mm(21-11/16in.), allowing more freedom in piping layout design and reducing horizontal piping requirements.



Specifications

			PEFY-P40VMH-E	PEFY-P50VMH-E	PEFY-P63VMH-E	PEFY-P71VMH-E	PEFY-P80VMH-E	PEFY-P100VMH-E	PEFY-P125VMH-E	PEFY-P140VMH-E
Power source			~ 220-240V 50Hz / 60Hz							
Cooling capacity	*1	kW	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
	*1	BTU/h	15,400	19,100	24,200	27,300	30,700	38,200	47,800	54,600
	*2	kW	4.7	5.8	7.3	8.3	9.3	11.6	14.5	16.3
	*2	kcal/h	4,000	5,000	6,300	7,100	8,000	10,000	12,500	14,000
Heating capacity	*1	kW	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0
	*1	kcal/h	4,300	5,400	6,900	7,700	8,600	10,800	13,800	14,000
	*1	BTU/h	17,100	21,500	27,300	30,700	34,100	42,700	54,600	61,400
Power consumption (50/60Hz)	Cooling	kW	0.19 / 0.23		0.24 / 0.30		0.32 / 0.40		0.48 / 0.58	
	Heating	kW	0.19 / 0.23		0.24 / 0.30		0.32 / 0.40		0.48 / 0.58	
Current	Cooling	A	0.88 / 1.06		1.12 / 1.38		1.47 / 1.83		2.34 / 2.66	
	Heating	A	0.88 / 1.06		1.12 / 1.38		1.47 / 1.83		2.34 / 2.66	
External finish			Galvanizing							
Dimension H × W × D		mm	380 × 750 × 900			380 × 1,000 × 900		380 × 1,200 × 900		
		in.	15 × 29-9/16 × 35-7/16			15 × 39-3/8 × 35-7/16		15 × 47-1/4 × 35-7/16		
Net weight		kg(lbs.)	44 (98)	45 (100)			50 (111)		70 (155)	
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)							
Fan	Type		Sirocco fan × 1				Sirocco fan × 2			
	Airflow rate (Lo-Hi)	m³/min	10.0-14.0		13.5-19.0		15.0-25.0		26.5-38.0	
		L/s	167-233		225-317		258-367		300-417	
		cfm	353-494		477-671		547-777		636-883	
	External static pressure #3	220V	50 / 100 /200							
	230,240V	Pa	100 / 150 / 200							
Motor	Type		Single phase induction motor							
	Output	*4 kW	0.08		0.12		0.14		0.18	
Air filter (option)			Synthetic fiber unwoven cloth filter (long life)							
Refrigerant pipe diameter	Gas (Brazing)	mm(in.)	ø 12.7 (1/2)	ø 12.7 (1/2)		ø15.88 (5/8)			ø15.88 (5/8)	
	Liquid (Brazing)	mm(in.)	ø 6.35 (1/4)	ø 6.35(1/4)		ø9.52 (3/8)				
Drain pipe diameter		mm(in.)	O.D. 32 (1-1/4)				O.D. 32 (1-1/4)			
Noise level (Lo-Hi)	220V	dB(A)	27-34		32-38		32-39		35-41	
	*5 230,240V	dB(A)	31-37		36-41		35-41		38-43	
										38-44

			PEFY-P200VMH-E			PEFY-P250VMH-E		
Power source			3N ~ 380-415V 50Hz / 60Hz					
Cooling capacity	*1	kW	22.4			28.0		
	*1	BTU/h	76,400			95,500		
	*2	kW	23.3			29.1		
	*2	kcal/h	20,000			25,000		
Heating capacity	*1	kW	25.0			31.5		
	*1	kcal/h	21,500			27,100		
	*1	BTU/h	85,300			107,500		
Power consumption (50/60Hz)	Cooling	kW	0.99 / 1.14			1.23 / 1.41		
	Heating	kW	0.99 / 1.14			1.23 / 1.41		
Current	Cooling	A	1.62 / 1.86			2.0 / 2.3		
	Heating	A	1.62 / 1.86			2.0 / 2.3		
External finish			Galvanizing					
Dimension H × W × D		mm	470 × 1,250 × 1,120					
		in.	18-9/16 × 49-1/4 × 44-1/8					
Net weight		kg(lbs.)	100 (221)					
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)					
Fan	Type		Sirocco fan X 2					
	Airflow rate	m³/min	58.0			72.0		
		L/s	967			1200		
		cfm	2048			2543		
	External static pressure #5	380V	110 / 220					
		400,415V	130 / 260					
Motor	Type		3-phase induction motor					
	Output	*6 kW	0.76			1.08		
Air filter(option)			Synthetic fiber unwoven cloth filter (long life)					
Refrigerant pipe diameter	Gas (Brazing)	mm(in.)	ø19.05 (3/4)			ø22.2 (7/8)		
	Liquid (Brazing)	mm(in.)	ø9.52 (3/8)					
Drain pipe diameter		mm(in.)	O.D. 32 (1-1/4)					
Noise level #7	380V	dB(A)	42 (110Pa) / 45 (220Pa)			50 (110Pa) / 52 (220Pa)		
	400,415V	dB(A)	44 (130Pa) / 47 (260Pa)			52 (130Pa) / 54 (260Pa)		

Note: Cooling/heating capacity indicates the maximum value at operation under the following condition.

*1 Cooling Indoor: 27°C(80.6°F)DB/19°C(66.2°F)WB, Outdoor: 35°C(95°F)DB

Heating Indoor: 20°C(68°F)DB, Outdoor: 7°C(44.6°F)DB/6°C(42.8°F)WB

*2 Cooling Indoor: 27°C(80.6°F)DB/19.5°C(67.1°F)WB, Outdoor: 35°C(95°F)DB

Heating Indoor: 21°C(69.8°F)DB, Outdoor: 7°C(44.6°F)DB/6°C(42.8°F)WB

*3 The external static pressure is set to 100Pa (at 220V) /150Pa (at 230, 240V) at factory shipment.

*4 The value are that at 240V.

*5 The external static pressure is set to 220Pa (at 380V) /260Pa (at 400, 415V) at factory shipment.

*6 The value are that at 415V.

*7 It is measured in anechoic room.

*4 The value are that at 240V.

*5 The external static pressure is set to 220Pa (at 380V) /260Pa (at 400, 415V) at factory shipment.

*6 The value are that at 415V.

*7 It is measured in anechoic room.

INDOOR UNIT
Ceiling Suspended Type

PCFY-P VGM-E



Designed for ultra-quiet operation and easy maintenance, provides exceptionally comfortable air-conditioning.



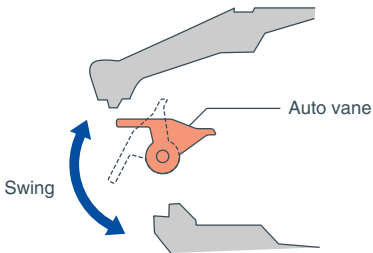
Extra slim, extra stylish

Seek and slim with stylishly curved lines, the PCFY series blends right into any interior. It also features a single air outlet which allows the auto vane to act as a shutter when the unit is turned off.



Auto vane distributes air evenly

The auto vane swings up and down automatically to distribute air more evenly to every corner of the room.



Keeps airflow at optimum level according to ceiling height

The most suitable airflow can be selected for ceilings up to 3.5m high, enhancing air-conditioning efficiency and comfort.

	Standard	High ceiling
Ceiling height	2.7(8-7/8)	3.5(11-1/2)

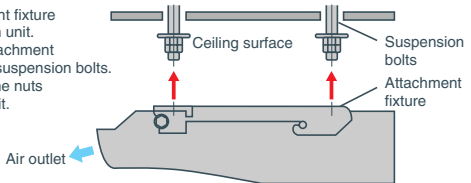
m (ft)

Greatly simplified installation

The new direct suspension system eliminates the task of removing the attachment fixture from the main unit, greatly shortening installation time.

Direct suspension with attachment fixture attached

1. Leave attachment fixture attached to main unit.
2. Suspend the attachment fixture from the suspension bolts.
3. Simply tighten the nuts to secure the unit.



*A one-touch suspension is also available; simply suspend the main unit from the attachment fitting after securing the latter to the ceiling.

Drain piping can be connected in one of two directions, to the left or the right of the unit

► Specifications

			PCFY-P40VGM-E	PCFY-P63VGM-E	PCFY-P100VGM-E	PCFY-P125VGM-E
Power source			~ 220-240V 50Hz / ~ 220V 60Hz			
Cooling capacity	※1	kW	4.5	7.1	11.2	14.0
	※1	BTU/h	15,400	24,200	38,200	47,800
	※2	kW	4.7	7.3	11.6	14.5
	※2	kcal/h	4,000	6,300	10,000	12,500
Heating capacity	※1	kW	5.0	8.0	12.5	16.0
	※1	kcal/h	4,300	6,900	10,800	13,800
	※1	BTU/h	17,100	27,300	42,700	54,600
Power consumption	Cooling	kW	0.10	0.13	0.16	0.24
	Heating	kW	0.10	0.13	0.16	0.24
Current	Cooling	A	0.46	0.60	0.73	1.10
	Heating	A	0.46	0.60	0.73	1.10
External finish(Munsell No.)			0.70Y 8.59 / 0.97			
Dimension H × W × D	mm		210 × 1,000 × 680	210 × 1,310 × 680	270 × 1,310 × 680	270 × 1,620 × 680
	in.		8-5/16 × 39-3/8 × 26-13/16	8-5/16 × 51-5/8 × 26-13/16	10-11/16 × 51-5/8 × 26-13/16	10-11/16 × 63-13/16 × 26-13/16
Net weight	kg(lbs.)		27 (60)	34 (75)	37 (82)	43 (95)
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)			
Fan	Type		Sirocco fan × 2		Sirocco fan × 3	
	Airflow rate ※3 (Lo-Mid2-Mid1-Hi)	m³/min	8-10-11-12		12-14-16-18	
		L/s	133-167-183-200		200-233-267-300	
		cfm	253-353-388-424		424-494-565-636	
	External static pressure	Pa	0			
Motor	Type		Single phase induction motor			
	Output	kW	0.054	0.070	0.090	0.150
Air filter			PP Honeycomb (long life)			
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (1/2)	ø15.88 (5/8)	ø15.88 (5/8) / ø19.05 (3/4) (Compatible)	
	Liquid (Flare)	mm(in.)	ø6.35 (1/4)	ø9.52 (3/8)		
Drain pipe diameter		mm(in.)	I.D. 26 (1) <VP-25>			
Noise level (Lo-Mid2-Mid1-Hi) ※3 ※4		dB(A)	29-33-36-38	32-34-37-39	36-38-41-43	37-39-42-44

Note: ※1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor: 27°C(80.6°F)DB/19°C(66.2°F)WB, Outdoor 35°C(95°F)DB
Heating Indoor: 20°C(68°F)DB, Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB
※2 Cooling capacity indicates the maximum value at operation under the following condition.
Cooling Indoor: 27°C(80.6°F)DB/19.5°C(67.1°F)WB, Outdoor 35°C(95°F)DB
Heating Indoor: 21°C(69.8°F)DB, Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB
※3 airflow rate/noise level are shown in (low-middle 2-middle 1-high).
※4 It is measured in anechoic room.

INDOOR UNIT
Wall Mounted Type

PKFY-P VAM-E
PKFY-P VGM-E
PKFY-P VFM-E



Elegant Design and Compact Dimensions Ideal for Offices,
Stores and Residential Uses.



Capacity range							
Capacity	P20	P25	P32	P40	P50	P63	P100
VAM	●	●					
VGM			●	●	●		
VFM						●	●

Compact design with 990mm(39in.) width
(PKFY-P VGM)

Width reduced by 20% to a compact
990mm(39in.).
Extra compactness has been achieved
thanks to a 20%(260mm(10-1/4in.))
reduction in which compared with previ-
ous models.

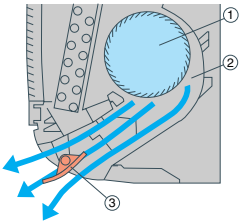
Compact 295mm(11-5/8in.)
high body fits snugly in even limited
spaces (PKFY-P VAM)

Lightweight 8.5kg(20lbs) unit easy to
transport and install (PKFY-P VAM)

Auto-flap shutter enhances
good looks

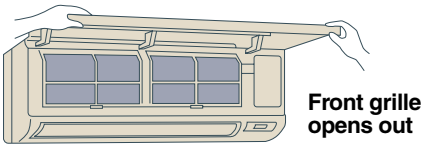
Quiet operation (PKFY-P VGM)

- Among the quietest in the industry**
Airflow passage configuration that assures quiet operations
1. The unit incorporates a random pitch cyclic fan. By chang-
ing fan intervals reduction in airflow. Optimal design of the
airflow passage gives a shorted fan diameter and allows a
highly compact installation.
 2. Thanks to a highly practical casing configuration, airflow
generated by the fan is distributed uniformly.
 3. Due to careful positioning of the vertical vane axis, air is
blown evenly from the fan. This prevents mixing with sec-
ondary air, and also suppresses condensation.



Front grille opens out - easy filter cleaning (PKFY-P VGM)

In room air conditioning style, the grille
opens out allowing the filter to be re-
moved. The filter and open grille can
therefore be thoroughly and easily
cleaned.



Front power supply box for easier
wiring even after installation

The front power supply box allows electri-
cal wiring work to be done after the in-
door unit has been installed. For easier
installation, all the screws required for se-
curing the indoor unit to the wall are ac-
cessible from the front of the unit.

5-way piping provides more flexibility
in selecting installation sites

All piping including drainage can be con-
nected from the rear, right, base, and left
of the unit, providing much greater flexibil-
ity out piping and selecting installation
site.

Specifications

			PKFY-P20VAM-E	PKFY-P25VAM-E	PKFY-P32VGM-E	PKFY-P40VGM-E	PKFY-P50VGM-E
Power source			~ 220-240V 50Hz ~ 220V 60Hz				
Cooling capacity	*1	kW	2.2	2.8	3.6	4.5	5.6
	*1	BTU/h	7,500	9,600	12,300	15,400	19,100
	*2	kW	2.3	2.9	3.7	4.7	5.8
	*2	kcal/h	2,000	2,500	3,150	4,000	5,000
Heating capacity	*1	kW	2.5	3.2	4.0	5.0	6.3
	*1	kcal/h	2,200	2,800	3,400	4,300	5,400
	*1	BTU/h	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling	kW	0.04			0.07	
	Heating	kW	0.04			0.07	
Current	Cooling	A	0.20			0.32	
	Heating	A	0.20			0.32	
External finish(Munsel No.)			Plastic 2.60Y 8.66/0.69				Plastic <PS,ABS> white 0.70Y 8.59/0.97
Dimension H × W × D			mm(in.) 295 × 815 × 158 (11-5/8 × 32-1/8 × 6-1/4)				340 × 990 × 235 (13-7/16 × 39 × 6-5/16)
Net weight			kg(lbs.) 8.5 (19)				16 (36)
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)				
Fan	Type		Line flow fan X 1				
	Airflow rate *3 (Lo-Hi)	m³/min	4.9-5.2-5.6-5.9			8-9.5-10.5-11.5	
		L/s	82-87-93-98			133-158-175-192	
		cfm	173-184-198-208			283-335-371-406	
	External static pressure	Pa	0				
Motor	Type		Single phase induction motor				
	Output	kW	0.017			0.030	
Air filter			PP Honeycomb (long life)				
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (1/2)				ø 12.7 (1/2) / ø 15.88 (5/8) (Compatible)
	Liquid (Flare)	mm(in.)	ø6.35 (1/4)				ø 6.35 (1/4) / ø 9.52 (3/8) (Compatible)
Drain pipe diameter			mm(in.) I.D.16 (5/8) <VP-16>			I.D. 20 (3/4) <VP-20>	
Noise level (Lo-Mid2-Mid1-Hi) *3 *4			dB(A) 32-33-35-36			33-36-38-41	
						34-37-40-43	

Note: *1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor: 27°C(80.6°F)DB/19°C(66.2°F)WB, Outdoor: 35°C(95°F)DB
Heating Indoor: 20°C(68°F)DB, Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB
*2 Cooling capacity indicates the maximum value at operation under the following condition.
Cooling Indoor: 27°C(80.6°F)DB/19.5°C(67.1°F)WB, Outdoor 35°C(95°F)DB
Heating Indoor: 21°C(69.8°F)DB, Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB
*3 Airflow rate/noise level are in (low-middle2-middle1-high).
*4 It is measured in anechoic room.

			PKFY-P63VFM-E	PKFY-P100VFM-E
Power source			220-230-240V 50Hz / 220V 60Hz	
Cooling capacity	*1	kW	7.1	11.2
	*1	BTU/h	24,200	38,200
		kcal/h	6,300	10,000
Heating capacity	*1	kW	8.0	12.5
	*1	BTU/h	27,300	42,700
Power consumption	Cooling	kW	0.12	0.14
	Heating	kW	0.12	0.14
Current	Cooling	A	0.55	0.64
	Heating	A	0.55	0.64
External finish(Munsel No.)			Plastic, white : <3.4Y7.7/0.8>	
Dimension	Height	mm(in.)	340 (13-3/8)	340 (13-3/8)
	Width	mm(in.)	1,400 (55-1/8)	1,680 (66-1/8)
	Depth	mm(in.)	235 (9-1/4)	235 (9-1/4)
Net weight			24 (53)	28 (62)
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)	
Fan	Type		Line flow fan × 2	
	Airflow rate *3 (Lo-Hi)	m³/min	15-20	22-28
		L/s		
		cfm		
	External static pressure	Pa	0	
Motor	Type		Single phase induction motor	
	Output	kW	0.040	0.070
Air filter			PP Honeycomb (antibacterial)	
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø15.88 (5/8)	ø15.88 (5/8) / ø19.05 (3/4)
	Liquid (Flare)	mm(in.)	ø9.52 (3/8)	
Drain pipe diameter			mm(in.) I.D. 20 (3/4) <VP-20>	
Noise level (Lo-Hi) *3 *4			39-45	41-46

Note: 1. Cooling/heating capacity indicates the maximum value at operation under the following condition
*1 Cooling Indoor: 27°C(80.6°F)DB/19°C(66.2°F)WB, Outdoor: 35°C(95°F)DB
Heating Indoor: 20°C(68°F)DB, Outdoor: 7°C(44.6°F)DB/6°C(42.8°F)WB
*2 Cooling Indoor: 27°C(80.6°F)DB/19.5°C(67.1°F)WB, Outdoor: 35°C(95°F)DB
*3 Airflow rate/noise level are in (low-high).
*4 It is measured in anechoic room.

INDOOR UNIT
Floor standing type

PFFY-P VLEM-E



Floor mounted lowboy type effective in perimeter zone.



Standardized design with mild lines.
Supports various types of spaces from office buildings and shop buildings to hospitals.
Water vapor permeable film humidifier can be installed.
Remote control can be installed onto the main unit.

Compact unit for easy air conditioning in perimeter zone.

The compact body of 220mm(8-11/16in.) in depth can be easily installed in the perimeter zone for effective air conditioning in the perimeter zone.

Electronics dry function dehumidify refreshingly.

Optimum dehumidification depending on indoor temperature to prevent over-cooling. Refreshing dehumidification can be attained.

INDOOR UNIT
Floor mounted concealed type

PFFY-P VLRM-E



Neatly installed with pericover concealed.
Easy installation in perimeter zone.



Compact unit for easy air conditioning in perimeter zone.

The body is concealed in the pericover to pursue harmony with the interior.
The compact body of 220mm(8-11/16in.) in depth can be easily installed in the perimeter zone.

Electronics dry function dehumidify refreshingly to prevent over-cooling.

Optimum dehumidification depending on indoor temperature to prevent over-cooling. Refreshing dehumidification can be attained.

► Specifications

			PFFY-P20VLEM-E	PFFY-P25VLEM-E	PFFY-P32VLEM-E	PFFY-P40VLEM-E	PFFY-P50VLEM-E	PFFY-P63VLEM-E	
Power source			~ 220-240V 50Hz / ~ 208-230V 60Hz						
Cooling capacity	※1	kW	2.2	2.8	3.6	4.5	5.6	7.1	
	※1	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200	
	※2	kW	2.3	2.9	3.7	4.7	5.8	7.3	
	※2	kcal/h	2,000	2,500	3,150	4,000	5,000	6,300	
Heating capacity	※1	kW	2.5	3.2	4.0	5.0	6.3	8.0	
	※1	kcal/h	2,200	2,800	3,400	4,300	5,400	6,900	
	※1	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300	
Power consumption	Cooling	kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11	
	Heating	kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11	
Current	Cooling	A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47	
	Heating	A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47	
External finish(Munsel No.)			Acrylic paint (5Y 8/1)						
Dimension H × W × D	mm		630 × 1,050 × 220			630 × 1,170 × 220		630 × 1,410 × 220	
	in.		24-13/16 × 41-3/8 × 8-11/16			24-13/16 × 46-1/8 × 8-11/16		24-13/16 × 55-9/16 × 8-11/16	
Net weight	kg(lbs.)		23 (51)			25 (56)	26 (58)	30 (67)	32 (71)
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)						
Fan	Type		Sirocco fan × 1			Sirocco fan × 2			
	Airflow rate ※3 (Lo-Mid2-Mid1-Hi)	m³/min	5.5-6.5			7.0-9.0	9.0-11.0	12.0-14.0	12.0-15.5
		L/s	92-108			117-150	150-183	200-233	200-258
		cfm	194-230			247-318	318-388	424-494	424-547
External static pressure		Pa	0						
Motor	Type		Single phase induction motor						
	Output	kW	0.015		0.018	0.030	0.035	0.063	
Air filter			PP Honeycomb fabric (washable)						
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (1/2)				ø12.7 (1/2)	ø15.88 (5/8)	
	Liquid (Flare)	mm(in.)	ø6.35 (1/4)				ø6.35 (1/4)	ø9.52 (3/8)	
Drain pipe diameter		mm(in.)	I.D.26 (1) <Accessory hose O.D.27 (top end :O.D.20)>						
Noise level (Low-High) ※3 ※4 ※5		dB(A)	34-40		35-40	38-43		40-46	

			PFFY-P20VLRM-E	PFFY-P25VLRM-E	PFFY-P32VLRM-E	PFFY-P40VLRM-E	PFFY-P50VLRM-E	PFFY-P63VLRM-E	
Power source			~ 220-240V 50Hz / ~ 208-230V 60Hz						
Cooling capacity	※1	kW	2.2	2.8	3.6	4.5	5.6	7.1	
	※1	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200	
	※2	kW	2.3	2.9	3.7	4.7	5.8	7.3	
	※2	kcal/h	2,000	2,500	3,150	4,000	5,000	6,300	
Heating capacity	※1	kW	2.5	3.2	4.0	5.0	6.3	8.0	
	※1	kcal/h	2,200	2,800	3,400	4,300	5,400	6,900	
	※1	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300	
Power consumption	Cooling	kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11	
	Heating	kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11	
Current	Cooling	A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47	
	Heating	A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47	
External finish(Munsel No.)			Galvanizing						
Dimension H × W × D		mm	639 × 886 × 220			639 × 1,006 × 220		639 × 1,246 × 220	
		in.	25-3/16 × 34-15/16 × 8-11/16			25-3/16 × 39-5/8 × 8-11/16		25-3/16 × 49-1/16 × 8-11/16	
Net weight		kg(lbs.)	18.5 (41)		20 (45)	21 (47)	25 (56)	27 (60)	
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)						
Fan	Type		Sirocco fan × 1			Sirocco fan × 2			
	Airflow rate ※3 (Lo-Mid2-Mid1-Hi)	m³/min	5.5-6.5			7.0-9.0	9.0-11.0	12.0-14.0	12.0-15.5
		L/s	92-108			117-150	150-183	200-233	200-258
		cfm	194-230			247-318	318-388	424-494	424-547
External static pressure		Pa	0						
Motor	Type		Single phase induction motor						
	Output	kW	0.015		0.018	0.030	0.035	0.063	
Air filter			PP Honeycomb fabric (washable)						
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (1/2)				ø12.7 (1/2)	ø15.88 (5/8)	
	Liquid (Flare)	mm(in.)	ø6.35 (1/4)				ø6.35 (1/4)	ø9.52 (3/8)	
Drain pipe diameter		mm(in.)	I.D.26 (1) <Accessory hose O.D.27 (top end :O.D.20)>						
Noise level (Low-High) ※3 ※4 ※5		dB(A)	34-40		35-40	38-43		40-46	

- Note:**
- ※1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor: 27 °C(80.6 °F)DB/19 °C(66.2 °F)WB,Outdoor 35 °C(95 °F)DB
Heating Indoor: 20 °C(68 °F)DB,Outdoor 7 °C(44.6 °F)DB/6 °C(42.8 °F)WB
 - ※2 Cooling capacity indicates the maximum value at operation under the following condition.
Cooling Indoor: 27 °C(80.6 °F)DB/19.5 °C(67.1 °F)WB,Outdoor 35 °C(95 °F)DB
Heating Indoor: 21 °C(69.8 °F)DB,Outdoor 7 °C(44.6 °F)DB/6 °C(42.8 °F)WB
 - ※3 Air flow rate/noise level are in (Low-High)
 - ※4 Measured point : 1m51m, Power supply : AC240V/50Hz
-1dB(A) lower at AC230V/50Hz
-2dB(A) lower at AC220V/50Hz
-3dB(A) lower at 1.5m51.5m point
 - ※5 It is measured in anechoic room.

INDOOR UNIT
Fresh Air Intake Type

PEFY-P VMH-E-F

Fresh
Air Intake

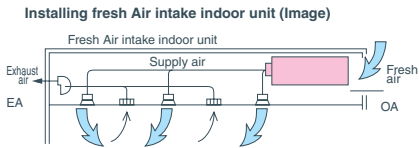
Fresh Air can be taken in with temperature control.
Ideal for Offices, Stores and Restaurant.



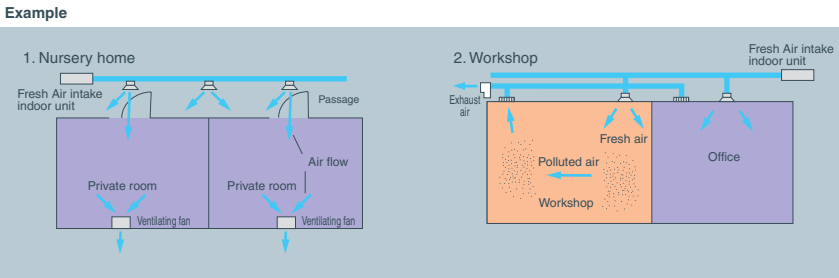
The Fresh Air intake indoor unit
can be installed in any place.

The Fresh Air intake indoor unit can take
fresh outdoor air into any building in any
place at any time.

Office, Lobby, Workshop,
Rest room, Nursery home,
Smoking corner,
Kitchen in restaurant



* Limits of capacity connectable to outdoor unit
Max. 110% of outdoor unit capacity, excepting heating at outdoor temperature of less than -5°C(23°F) (100%).



< Note>
Fan remains in operation during Thermo-OFF. Using this model with other type of indoor
unit is recommended for Cold Draft prevention because Cold Draft might occur by using
only this model that takes in fresh air.

► Specifications

			PEFY-P80VMH-E-F		PEFY-P140VMH-E-F	
Power source			~ 220-240V 50Hz / ~ 208-230V 60Hz			
Cooling capacity	*1	kW	9.0		16.0	
	*1	BTU/h	30,700		54,600	
Heating capacity	*1	kW	8.5		15.1	
	*1	BTU/h	29,000		51,500	
Power consumption	Cooling	kW	0.16 / 0.21		0.29 / 0.33	
	Heating	kW	0.16 / 0.21		0.29 / 0.33	
Current	Cooling	A	0.67 / 0.91		1.24 / 1.48	
	Heating	A	0.67 / 0.91		1.24 / 1.48	
External finish			Galvanizing			
Dimension	Height	mm(in.)	380 (15)			
	Width	mm(in.)	1000 (39-3/8)		1200 (47-1/4)	
	Depth	mm(in.)	900 (35-7/16)			
Net weight		kg(lbs.)	50 (111)		70 (155)	
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)			
Fan	Type		Sirocco fan × 1		Sirocco fan × 2	
	Airflow rate	m³/min	9.0		18.0	
		L/s	150		300	
		cfm	18		636	
	External static pressure	208V	Pa		35 / 85 / 170	
		220V	Pa		40 / 115 / 190	
		230V	Pa		50 / 130 / 210	
		240V	Pa		60 / 130 / 220	
(Low/Mid/High)		80 / 170 / 220		100 / 170 / 240		
Motor	Type	Single phase induction motor				
	Output	kW	0.09		0.14	
Air filter			Synthetic fiber unwoven cloth filter (long life)			
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø15.88 (5/8)		ø15.88 (5/8)	
	Liquid (Flare)	mm(in.)	ø9.52 (3/8)			
Drain pipe diameter		mm(in.)	O.D.32 (1-1/4)			
Noise level #2	208, 220V	dB(A)	27 / 38 / 43		28 / 38 / 43	
	230, 240V	dB(A)	33 / 43 / 45		34 / 43 / 45	

			PEFY-P200VMH-E-F		PEFY-P250 VMH-E-F	
Power source			3N~ 380-415V 50Hz / 60Hz			
Cooling capacity		kW	22.4		28.0	
		BTU/h	76,400		95,500	
Heating capacity		kW	21.2		26.5	
		BTU/h	72,300		90,400	
Power consumption	Cooling	kW	0.34 / 0.42		0.39 / 0.50	
	Heating	kW	0.34 / 0.42		0.39 / 0.50	
Current	Cooling	A	0.58 / 0.74		0.68 / 0.86	
	Heating	A	0.58 / 0.74		0.68 / 0.86	
External finish			Galvanized			
Dimension	Height	mm(in.)	470 (18-9/16)			
	Width	mm(in.)	1250 (49-1/4)			
	Depth	mm(in.)	1120 (44-1/8)			
Net weight		kg(lbs.)	100 (221)			
Heat exchanger			Cross fin			
Fan	Type		Sirocco fan × 2			
	Airflow rate		m³/min	28	35	
			L/s	467	583	
			cfm	989	1236	
	External static pressure	380V	Pa	140 / 200	110 / 190	
		400V	Pa	150 / 210	120 / 200	
		415V	Pa	160 / 220	130 / 210	
Motor	Type		3-phase induction motor			
	Output		kW	0.20	0.23	
Air filter (option)			Synthetic fiber unmoven cloth filter (long life type)			
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø19.05 (3/4)		ø22.2 (7/8)	
	Liquid (Flare)	mm(in.)	ø9.52 (3/8)		ø9.52 (3/8)	
Drain pipe diameter		mm(in.)	O.D.32 (1-1/4)			
Noise level ※2	380V	dB(A)	39 / 42		40 / 44	
	400V	dB(A)	40 / 43		40 / 45	
	415V	dB(A)	40 / 44		41 / 465	

Note:

1. The cooling amd heating capacities are the maximum capacities that were obtained by operating in the above air conditions and with a refrigerant pipe of about 7.5m.
2. The actual capacity characteristics vary with the combination of indoor and outdoor units. See the technical information.
3. The operating noise is the data that was obtained by measuring it 1.5m from the bottom of the unit in an anechoic room. (Noise meter A-scale value)
4. The figure of Electrical characteristic , indicates at 220 Pa setting at 415V.
5. When the 100% fresh air indoor units are connected, the maximum connectable indoor units to 1 outdoor unit are as follows

Heat pump models	Cooling only
110%(100% in case of heating below-5°C(23°F))	110%

6. Operational temp range is (Cooling:from 21°C(69.8°F)DB/15.5°C(59.9°F)WB to 43°C(109.4°F)DB/35°C(95°F)WB)
Heating: from -10°C(14°F)DB to 20°C(68°F)DB)

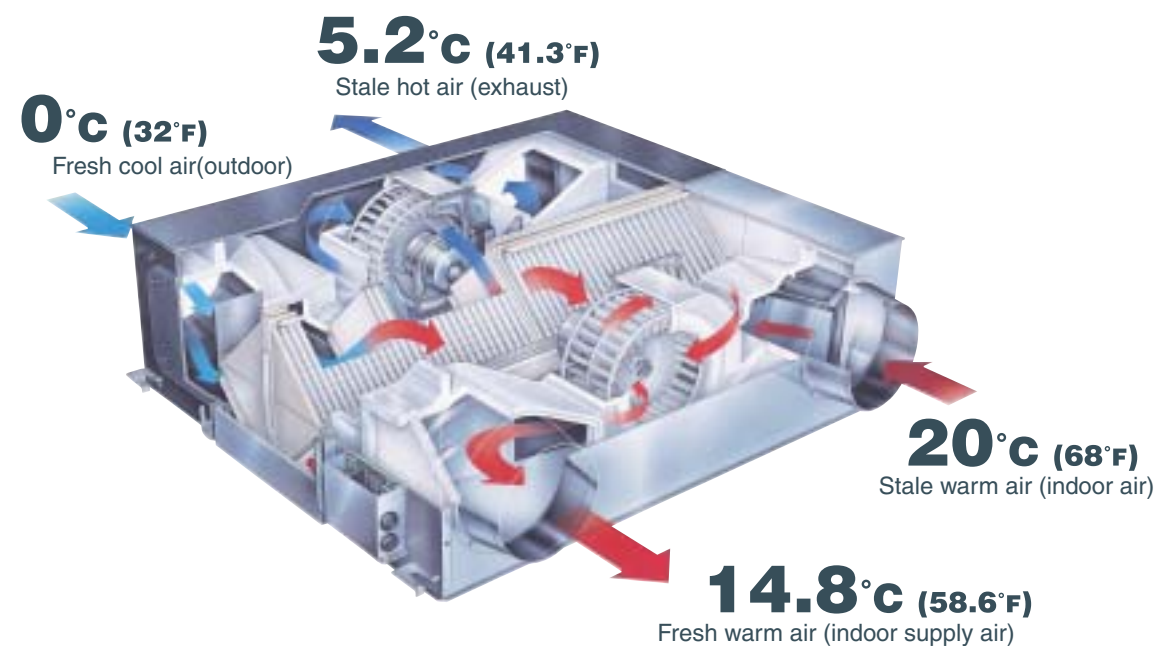
※ Thermo off(Fan) operation automatically starts either when temperature is lower than 21°C(69.8°F)DB in cooling mode or when the temperature exceeds 20°C(68°F)DB in heating mode.

7. As the room temp in sensed by the thermo in the remote controller or the one in the room, be sure to use either remote controller or room thermo.
8. Autochangeover function or Dry mode is NOT available. Fan mode operation during the thermo off in Cooling/Heating mode.
9. In any case, the air flow rate should be kept lower than 110% of the above chart. Please see "Fan curves" for the details.
10. When this nit is used as sole A/C system, be careful about the dew in air outlet grilles in cooling mode.
11. Un-conditioned outdoor air such as humid air or cold air blows to the indoor during thermo off operation.
Please be careful when positioning indoor unit air outlet grilles, ie take the necessary precautions for cold air, and also insulate rooms for dew condensation prevention as required.
12. Air filter must be installed in the air intake side. The filter should be attached where easy maintenance in possible in case of usage of fild supply filters.



The Ventilation System for Enhanced Air Quality - Lossnay

Combine with Lossnay Ventilation System Enhanced Air Quality.
Unified Control System Allows Greater Design Freedom.



LGH-15RX4 [150m³/h Single phase 220-240V 50Hz/60Hz]
LGH-25RX4 [250m³/h Single phase 220-240V 50Hz/60Hz]
LGH-35RX4 [350m³/h Single phase 220-240V 50Hz/60Hz]
LGH-50RX4 [500m³/h Single phase 220-240V 50Hz/60Hz]

LGH-80RX4 [800m³/h Single phase 220-240V 50Hz/60Hz]
LGH-100RX4 [1000m³/h Single phase 220-240V 50Hz/60Hz]
LGH-150RX4 [1500m³/h Single phase 220-240V 50Hz/60Hz]
LGH-200RX4 [2000m³/h Single phase 220-240V 50Hz/60Hz]

Heat-Exchange Efficiency Obtainable Only with Lossnay.

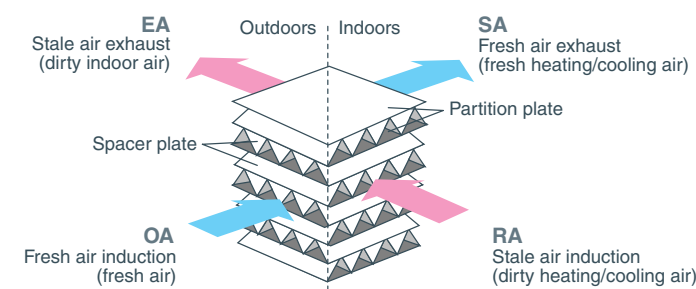
The secret to the unmatched comfort provided Lossnay core is the cross-flow, plate-fin structure off the heat-exchange unit. A diaphragm made of a specially processed paper fully separates inducted and exhausted air supplies, ensuring that only fresh air is introduced to the indoor environment.

The superior heat-transfer and moisture permeability of the special paper assure highly effective total heat exchange (temperature and humidity) when inducted? and exhausted air supplies cross in the Lossnay core.

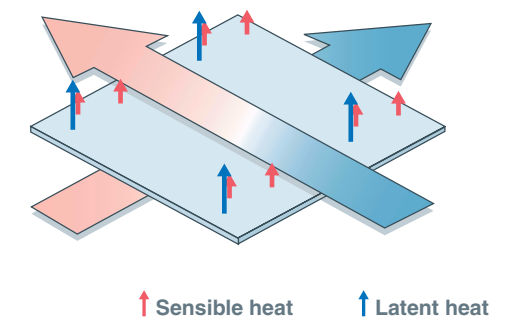
LOSSNAY Technology

- **Two paths ventilation**
LOSSNAY simultaneously intakes Fresh Air and exhausts Dirty Air.
- **Total energy recover**
LOSSNAY returns BOTH sensible heat and latent heat.

A. Two paths ventilation



B. Total Energy transfer



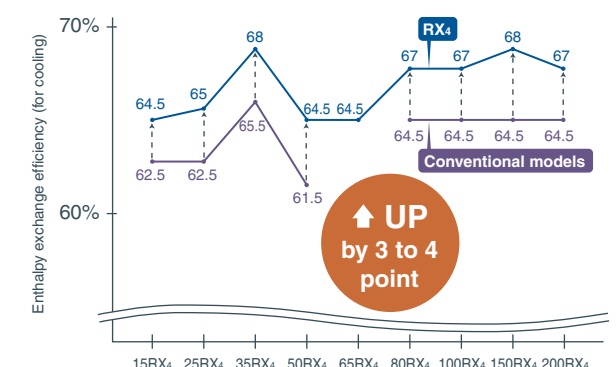
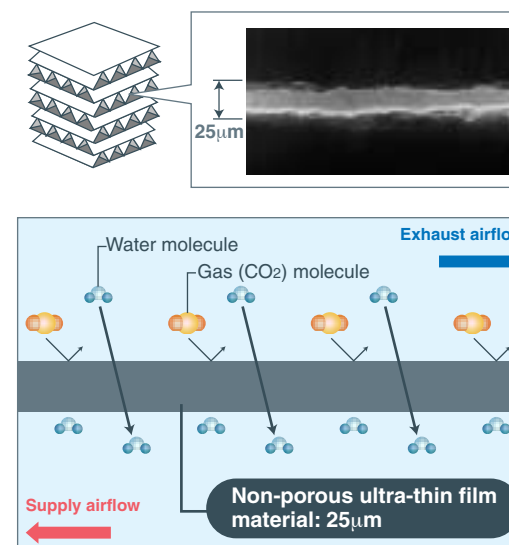
- **Hyper Performance [HYPER CORE]**
Mitsubishi developed "HYPER CORE" of World No.1

No dirty air return

LOSSNAY recovers energy but does NOT return dirty air to indoor by Non porous paper.

High Performance

Mitsubishi has World No.1 Energy exchange efficiency.



Why LOSSNAY is necessary?

• Without ventilation...

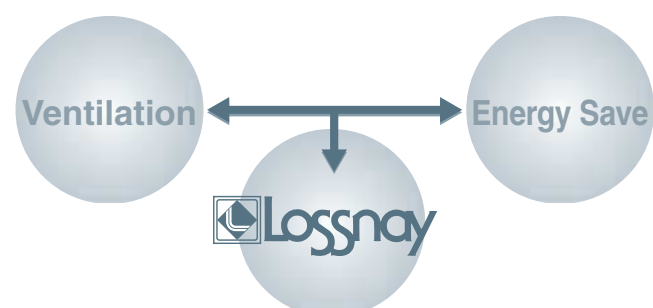
Lack of Ventilation makes people sick by dirty indoor air including CO₂, Dust, Bacteria.

• If just open windows...

Opening windows eliminates dirty air BUT wastes much air-con energy.

• So we recommend LOSSNAY

LOSSNAY is simultaneous pursuit of Ventilation and Energy Saving.



• This is LOSSNAY !

ADVANTAGES

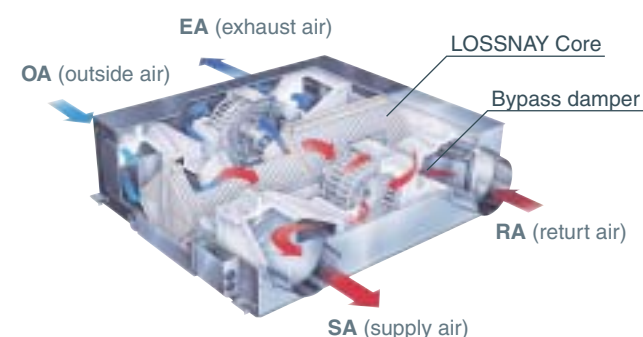
Clean air supply, dirty air exhaust by Two air paths (OA → SA and RA → EA)

Energy recovery by LOSSNAY Core

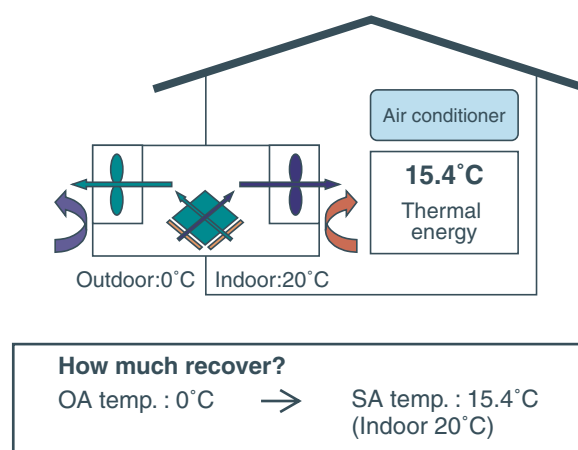
Free cooling by bypass damper

MULTI VENTILATION MODE for multi ventilation request (Power supply, Power supply/exhaust, Power exhaust)

UNIT STRUCTURE



Energy Recovery Image



LOSSNAY features

■ Multi Ventilation Mode for control air volume balance

Normal office, etc.



Many people in an office

Power air supply/exhaust

Smaller offices or tenant buildings, etc.



Extractor fan working place

Power air supply

Smoking areas, etc.



Priority air exhaust

Power air exhaust

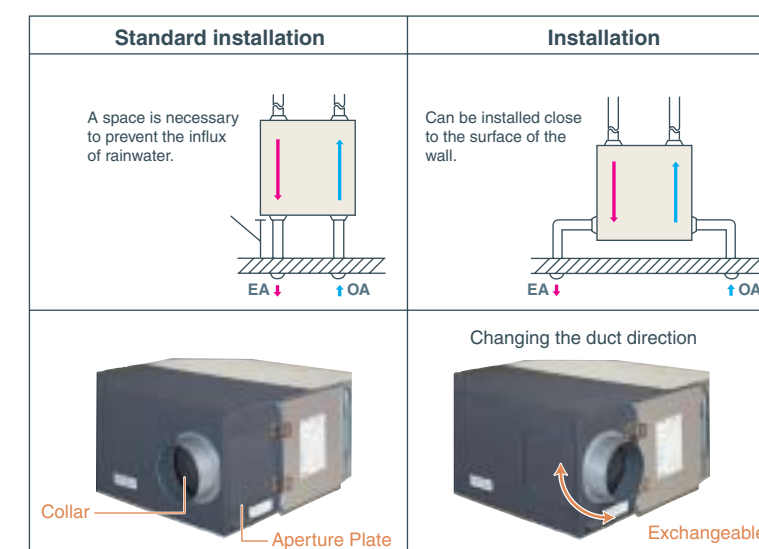
All LGH models feature the "Multi-ventilation Mode," which allows the air supply/exhaust balance to be varied dynamically to suit the usage environment and location. Modes can be selected easily by setting the connectors on the circuit board.

Ventilation Mode	Supply Airflow	Exhaust Airflow
Power air supply/exhaust mode	High	High
Power air supply mode	High	Low
Power air exhaust mode	Low	High
Energy-saving ventilation mode	Low	Low

* "High" can be further set to "Extra high" using the dip switch.

■ Easy Installation

Flexible duct work is available.



Model line up

■ Appearance



LGH-50RX4-E

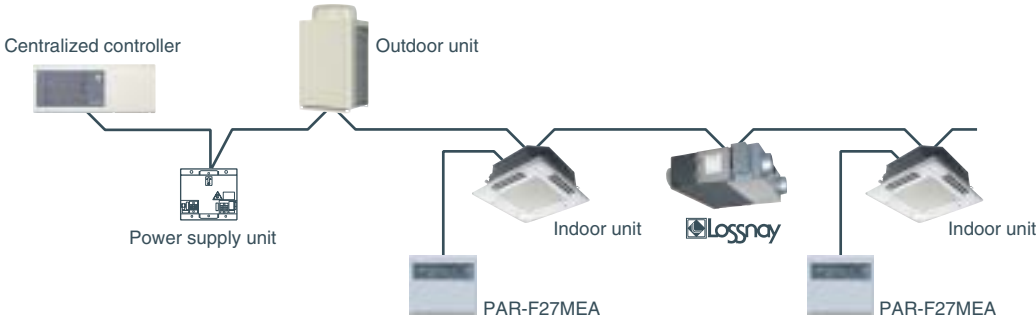


LGH-200RX4-E

■ Specification

			Model: LGH-RX4 series								
Model			15R	25R	35R	50R	65R	80R	100R	150R	200R
Power source			200/240V 1Ph 50/60Hz								
Size	L mm		780	780	888	1016	954	1164	1263	1413	1413
	W mm		610	735	874	888	908	1004	1164	1004	1231
	H mm		275	275	317	317	388	398	398	800	800
Volume	m³		0.13	0.16	0.25	0.29	0.34	0.47	0.59	1.13	1.39
Weight	kg		17	21	30	33	46	61	69	138	161
Duct diameter [mm]			100	150	150	200	250	250	250	350	350
Air Volume	Shi	CMH	150	250	350	500	650	800	1000	1500	2000
Static Pressure	Shi	Pa	95	80	150	150	110	140	160	140	150
Sound level A	Shi	dB	26	26.5	31	33	34.5	33.5	36	36.5	39
Sound level B	Shi	dB	33	34.5	39	41	42.5	44.5	47	49	51.5
Ex. Efficiency	Temp.	%	77	78	79	77	77	78	79	79	79
	Heatin	%	70	70	70	67.5	67.5	71	71	72	71
	Cooling	%	65.5	65	68	64.5	64.5	67	67	68	67

■ M-NET system with City Multi
Flexible system, for your multi demand



Installation

LOSSNAY ventilation combined with Air-con

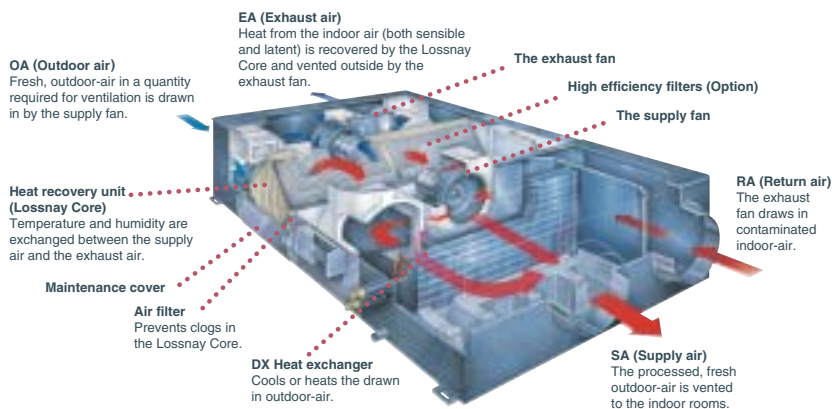


OA Processing Units



Ideal Indoor-Air Quality — For Your Comfort and Health

The OA (outdoor-air) Processing Unit creates an optimum indoor-air environment at an unparalleled rate of cost efficiency providing substantial energy savings. Forced air ventilating and humidifying functions unique to this system keep indoor-air fresh and free of contaminants preventing “sick building syndrome” and the spread of airborne viruses such as the flu. Another novel feature of the OA Processing Unit is the “Lossnay core,” a heat-exchange unit that functions to transfer heat efficiently, cutting ventilation load by as much as 70%. This special combination of functionality and performance designed to ensure users ample comfort and year-round health cannot be found anywhere else on the market.



GUF-50RD(H)3 *1	
Cooling Capacity	5.29 (DX coil:3.63, Lossnay:1.66)KW
Heating capacity	6.42 (DX coil:4.17, Lossnay:2.25)KW
	500m³/h Single phase 220-240V 50Hz
GUF-100RD(H)3 *1	
Cooling Capacity	10.81 (DX coil:7.32, Lossnay3.49)KW
Heating capacity	13.00 (DX coil:8.30, Lossnay:4.70)KW
	1000m³/h Single phase 220-240V 50Hz
	*1 H : Humidifying Type

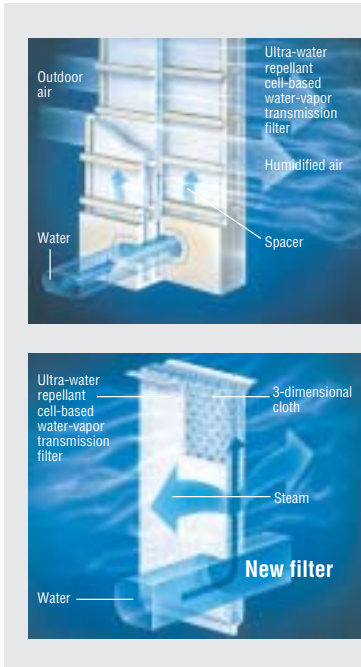
New Permeable Film Humidifier (RDH3 model)

Comfortable Level of Humidity for Exceptionable Air Quality

The OA Processing Unit is equipped with a new permeable film humidifier developed and patented by Mitsubishi Electric. Steam transmission efficiency has been improved remarkably by lowering the resistance of the material. The use of a 3-layer film that allows only the transfer of steam prevents the production of white powder, so there is no need for the use of a water purifier.

Highly Efficient Humidification

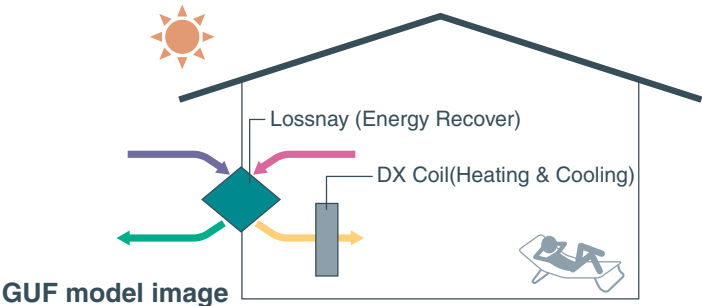
Improvements in the system of airflow patterns and water injection techniques have resulted in a substantial increase in humidifying volume.



RDH3 SERIES
OUTDOOR AIR PROCESSING UNIT GUF type

General

GUF - For the finest indoor quality
GUF = [LOSSNAY] + [HEATING & COOLING]



Specification

Model			GUF-50RDH3		GUF-100RDH3		GUF-50RD3		GUF-100RD3		
Power source			1-phase 220-240V 50Hz, 1-phase 220V 60Hz								
Cooling capacity Figure in < > is the recovery capacity by LOSSNAY core.	*1	kW	5.46	<1.83>	11.17	<3.85>	5.46	<1.83>	11.17	<3.85>	
	*1	kcal / h	4,700	<1,600>	9,600	<3,300>	4,700	<1,600>	9,600	<3,300>	
	*1	Btu / h	18,600	<6,200>	38,100	<13,100>	18,600	<6,200>	38,100	<13,100>	
	*2	kcal / h	4,500	<1,400>	9,300	<3,000>	4,500	<1,400>	9,300	<3,000>	
	Power input	kW	235-265		480-505		235-265		480-505		
	Current input	A	1.15		2.20		1.15		2.20		
Heating capacity Figure in < > is the recovery capacity by LOSSNAY core.	*3	kW	6.18	<2.01>	12.50	<4.20>	6.18	<2.01>	12.50	<4.20>	
	*3	kcal / h	5,300	<1,700>	10,800	<3,600>	5,300	<1,700>	10,800	<3,600>	
	*3	Btu / h	21,100	<6,900>	42,700	<14,300>	21,100	<6,900>	42,700	<14,300>	
	Power input	kW	235-265		480-505		235-265		480-505		
	Current input	A	1.15		2.20		1.15		2.20		
Capacity equivalent to indoor unit			P32		P63		P32		P63		
Humidifying capacity		kg / h	2.7		5.4		-		-		
		lb / h	6.0		12.0		-		-		
	Humidifier		Permeable film humidifier				-				
External finish			Galvanized, with grey insulation sheet								
External dimension H × W × D		mm	317 × 1,016 × 1,288		398 × 1,231 × 1,580		317 × 1,016 × 1,288		398 × 1,231 × 1,580		
		in.	12-1/2 × 40 × 50-3/4		15-11/16 × 48-1/2 × 62-1/4		12-1/2 × 40 × 50-3/4		15-11/16 × 48-1/2 × 62-1/4		
Net weight		kg (lb)	57 (126)		98 (217)		54 (120)		92 (203)		
Heat exchanger	LOSSNAY core		Partition, Cross-flow structure, Special preserved paper-plate.								
	Refrigerant coil		Cross fin (Aluminum fin and copper tube)								
FAN	Type × Quantity		SA: Centrifugal fan (Sirocco fan) × 1								
			EA: Centrifugal fan (Sirocco fan) × 1								
	External static press.	Pa	125		135		140		140		
			mmH ₂ O	12.7		13.8		14.3		14.3	
	Motor type		Totally enclosed capacitor permanent split-phase induction motor, 4 poles, 2units								
	Motor output		kW	-		-		-		-	
	Driving mechanism		Direct-driven by motor								
	Airflow rate (High value)	m ₃ / min	500		1,000		500		1,000		
		L / s	139		139		139		139		
			cfm	294		589		294		589	
Noise level (Low-High) (measured in anechoic room)		dB <A>	33.5-34.5		38-39		33.5-34.5		38-39		
Insulation material			Polyester sheet								
Air filter	Supplying air		Non-woven fabrics filter (Gravitational method 82%) & Optional part: High efficiency filter (Colorimetric method 65%)								
	Exhausting air		Non-woven fabrics filter (Gravitational method 82%)								
Protection device			Fuse								
Refrigerant control device			LEV								
Diameter of refrigerant pipe	Liquid	mm (in.)	ø6.35 (ø1/4) Flare		ø9.52 (ø3/8) Flare		ø6.35 (ø1/4) Flare		ø9.52 (ø3/8) Flare		
	Gas	mm (in.)	ø12.7 (ø1/2) Flare		ø15.88 (ø5/8) Flare		ø12.7 (ø1/2) Flare		ø15.88 (ø5/8) Flare		
Diameter of drain pipe		mm (in.)	VP25								

VP25




Outdoor unit

Heat Pump Series

Wide selection of outdoor units

S Series (4HP-6HP)

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PUMY-P VHM

Model	4HP	5HP	6HP
Model Name	PUMY-P100VHM	PUMY-P125VHM	PUMY-P140VHM

Y Series (26HP-32HP)

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PUHY-P TSHM-A

Model	30HP	32HP
Model Name	PUHY-P750TSHM-A	PUHY-P800TSHM-A

Y Series (8HP-14HP)

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PUHY-P THM-A




Model	8HP	10HP	12HP	14HP
Model Name	PUHY-P200THM-A	PUHY-P250THM-A	PUHY-P300THM-A	PUHY-P350THM-A

Y Series (34HP-36HP)

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PUHY-P TSHM-A



Model	34HP	36HP
Model Name	PUHY-P850TSHM-A(-BS)	PUHY-P900TSHM-A(-BS)

Y Series (16HP-18HP)

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PUHY-P THM-A

Model	16HP	18HP
Model Name	PUHY-P400THM-A	PUHY-P450THM-A

Y Series (38HP-46HP)

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PUHY-P TSHM-A



Model	38HP	40HP	42HP	44HP	46HP
Model Name	PUHY-P950TSHM-A	PUHY-P1000TSHM-A	PUHY-P1050TSHM-A	PUHY-P1100TSHM-A	PUHY-P1150TSHM-A

Y Series (20HP-24HP)

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PUHY-P TSHM-A




Model	20HP	22HP	24HP	26HP	28HP
Model Name	PUHY-P500TSHM-A	PUHY-P550TSHM-A	PUHY-P600TSHM-A	PUHY-P650TSHM-A	PUHY-P700TSHM-A

Y Series (48HP-50HP)

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PUHY-P TSHM-A



Model	48HP	50HP
Model Name	PUHY-P1200TSHM-A	PUHY-P1250TSHM-A

※The PUHY-P-TSHM-A series requires a Twinning kit (optional). Refer to the data book for details.



OUTDOOR UNIT
S Series
PUMY-P VHM



► Specifications

			PUMY-P100VHM	PUMY-P125VHM	PUMY-P140VHM
Power source			1-phase 220-230-240V 50Hz, 1-phase 220V 60Hz		
Cooling capacity (Nominal)	#1	kW	11.2	14.0	15.5
		kcal/h	9,600	12,000	13,300
		Btu/h	38,200	47,800	52,900
	Power input		3.34	4.32	5.35
	Current input		15.4-14.8-14.1, 15.4	20.0-19.1-18.3, 20.0	24.7-23.6-22.7, 24.7
	COP (kW/kW)		3.35	3.24	2.9
Temp. range of cooling	Indoor	W.B.	15 ~ 24°C (59 ~ 75°F)		
	Outdoor	D.B.	- 5 ~ 46°C (23 ~ 115°F)		
	10 to 46°C D.B. (50 to 115°F D.B.) : in case of connecting PKFY-P20 / P25 type indoor unit.				
Heating capacity (Nominal)	#2	kW	12.5	16.0	18.0
		kcal/h	10,800	13,800	15,500
		Btu/h	42,700	54,600	61,400
	Power input		3.66	4.33	5.58
	Current input		16.9-16.2-15.5, 16.9	20.0-19.1-18.3, 20.0	25.8-24.7-23.6, 25.8
	COP (kW/kW)		3.42	3.69	3.23
Temp. range of heating	Indoor temp.	D.B.	15 ~ 27°C (59 ~ 81°F)		
	Outdoor temp.	W.B.	-15 ~ 15°C (5 ~ 59°F)		
Indoor unit connectable	Total capacity		50 ~ 130% of outdoor unit capacity		
	Model/Quantity		P20 ~ P125 / 1 ~ 6	P20 ~ P140 / 1 ~ 8	P20 ~ P140 / 1 ~ 8
Noise level (measured in anechoic room)		dB<A>	49 / 51	50 / 52	51 / 53
Diameter of refrigerant pipe	Liquid (High press.)	mm(in.)	ø9.52 (ø3/8) Liquid	ø9.52 (ø3/8) Liquid	ø9.52 (ø3/8) Liquid
	Gas (Low press.)	mm(in.)	ø15.88 (ø5/8) Gas	ø15.88 (ø5/8) Gas	ø15.88 (ø5/8) Gas
External finish			Galvanized steel sheet <MUNSELL 3Y 7.8/1.1>		
External dimension H × W × D		mm (in.)	1,350 × 950 × 330 (53-3/16 × 37-7/16 × 13)	1,350 × 950 × 330 (53-3/16 × 37-7/16 × 13)	1,350 × 950 × 330 (53-3/16 × 37-7/16 × 13)
Net weight		kg (lb)	127 (280 lb)	127 (280 lb)	127 (280 lb)
Heat exchanger			Salt-resistant cross fin & copper tube		
Compressor	Type		Inverter scroll hermetic comp.		
	Starting method		Inverter		
	Motor output	kW	2.2	2.9	3.3
FAN	Air flow rate	m³/min	100	100	100
		L/s	1667	1667	1667
		cfm	3532	3532	3532
	Type × Quantity		Propeller fan × 2	Propeller fan × 2	Propeller fan × 2
	Motor output		0.06 × 2	0.06 × 2	0.06 × 2
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		
	Compressor		Discharge thermo protection, Over-current protection		
Refrigerant	Type × Original charge		R410A × 8.5kg (19 lb)	R410A × 8.5kg (19 lb)	R410A × 8.5kg (19 lb)

Note:

- ※1 Nominal cooling conditions
Indoor 27°C (81°F) DB/19°C (66°F) WB, Outdoor 35°C (95°F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)
- ※2 Nominal heating conditions
Indoor 20°C (68°F) DB,Outdoor 7°C (45°F) DB/6°C (43°F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

Outdoor unit

OUTDOOR UNIT
Y Series
PUHY-P THM-A



► Specifications

			PUHY-P200THM-A(-BS)	PUHY-P250THM-A(-BS)	PUHY-P300THM-A(-BS)	PUHY-P350THM-A(-BS)
Power source			3-phase 3-wire 208-220-230V 60Hz			
Cooling capacity (Nominal)	※1	kW	22.4	28.0	33.5	40.0
		kcal/h	19,300	24,100	28,800	34,400
		Btu/h	76,400	95,500	114,300	136,500
	Power input	kW	5.73	8.20	9.10	13.01
	Current input	A	17.6-16.7-15.9	25.2-23.9-22.8	28.0-26.5-25.3	40.1-37.9-36.2
	COP (kW/kW)		3.90	3.41	3.68	3.07
Temp. range of cooling	Indoor	W.B.	15~24°C(59~75°F)			
	Outdoor	D.B.	- 5~43°C(23~109°F)			
Heating capacity (Nominal)	※2	kW	25.0	31.5	37.5	45.0
		kcal/h	21,500	27,100	32,300	38,700
		Btu/h	85,300	107,500	128,000	153,500
	Power input	kW	6.05	7.96	9.40	12.12
	Current input	A	18.6-17.6-16.8	24.5-23.2-22.2	28.9-27.4-26.2	37.3-35.3-33.8
	COP (kW/kW)		4.13	3.95	3.98	3.71
Temp. range of heating	Indoor temp.	D.B.	15~27°C(59~81°F)			
	Outdoor temp.	W.B.	-20~15.5°C(-4~60°F)			
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			
Noise level (measured in anechoic room)	Model/Quantity		P20~P250 / 1~13	P20~P250 / 1~16	P20~P250 / 1~16	P20~P400 / 1~20
Diameter of refrigerant pipe	Liquid		ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare (ø12.7 (ø1/2) Flare, total length >=90m)	ø9.52 (ø3/8) Flare (ø12.7 (ø1/2) Flare total length>=40m)	ø12.7 (ø1/2) Flare
	Gas		ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed
External finish			Pre-coated galvanized steel sheet <MUNSELL 5Y 8/1>			
External dimension H X W X D			mm(in.) 1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)
Net weight			kg(lb) 185 (408)	185 (408)	210 (463)	210 (463)
Heat exchanger			Salt-resistant cross fin & copper tube			
Compressor	Type		Inverter scroll hermetic compressor			
	Starting method		Inverter			
	Motor output	kW	5.4	6.7	8.2	10.1
FAN	Air flow rate	m³/min	185	185	185	0185
		L/s	3,083	3,083	3,083	3,083
		cfm	6,532	6,532	6,532	6,532
	Type X Quantity		Propeller fan X 1	Propeller fan X 1	Propeller fan X 1	Propeller fan X 1
	Motor output	kW	0.35 X 1	0.35 X 1	0.35 X 1	0.35 X 1
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)			
	Inverter circuit (COMP. / FAN)		Over-current protection, Over-heat protection			
	Compressor		Discharge thermo protection, Over-current protection			
Refrigerant	Type X Original charge		R410A X 6.5kg (14 lb + 5 oz)	R410A X 6.5kg (14 lb + 5 oz)	R410A X 9.0kg (19 lb + 13 oz)	R410A X 9.0kg (19 lb + 13 oz)

Note:

- ※1 Nominal cooling conditions
Indoor 27°C (81°F) DB/19°C (66°F) WB, Outdoor 35°C (95°F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)
- ※2 Nominal heating conditions
Indoor 20°C (68°F) DB,Outdoor 7°C (45°F) DB/6°C (43°F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

Outdoor unit

OUTDOOR UNIT
Y Series
PUHY-P THM-A



► Specifications

			PUHY-P400THM-A(-BS)	PUHY-P450THM-A(-BS)	
Power source			3-phase 3-wire 208-220-230V 60Hz		
Cooling capacity (Nominal)	※1	kW	45.0	50.0	
		kcal/h	38,700	43,000	
		Btu/h	153,500	170,600	
	Power input	kW	13.24	16.29	
		Current input	A	40.8-38.6-36.9	50.2-47.5-45.4
		COP (kW/kW)	3.39	3.06	
Temp. range of cooling	Indoor	W.B.	15~24°C (59~75°F)		
	Outdoor	D.B.	- 5~43°C (23~109°F)		
Heating capacity (Nominal)	※2	kW	50.0	56.0	
		kcal/h	43,000	48,200	
		Btu/h	170,600	191,100	
	Power input	kW	12.37	14.55	
		Current input	A	38.1-36.0-34.5	44.8-42.4-40.5
		COP (kW/kW)	4.04	3.84	
Temp. range of heating	Indoor temp.	D.B.	15~27°C (59~81°F)		
	Outdoor temp.	W.B.	-20~15.5°C (-4~60°F)		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		
	Model/Quantity		P20~P500 / 1~20	P20~P500 / 1~20	
Noise level (measured in anechoic room)			61	62	
Diameter of refrigerant pipe	Liquid	mm(in.)	ø12.7 (ø1/2) Flare	ø15.88 (ø5/8) Flare	
	Gas	mm(in.)	ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed	
External finish			Pre-coated galvanized steel sheet <MUNSELL 5Y 8/1>		
External dimension H X W X D		mm(in.)	1,650 X 1,220 X 760 (65 X 48-1/16 X 29-15/16)	1,650 X 1,220 X 760 (65 X 48-1/16 X 29-15/16)	
Net weight		kg(lb)	240 (529)	240 (529)	
Heat exchanger			Salt-resistant cross fin & copper tube		
Compressor	Type		Inverter scroll hermetic compressor		
	Starting method		Inverter		
FAN	Motor output	kW	10.5	12.0	
	Air flow rate	m³/min	225	225	
		L/s	3,750	3,750	
		cfm	7,945	7,945	
	Type X Quantity		Propeller fan X 1	Propeller fan X 1	
	Motor output	kW	0.46 X 1	0.46 X 1	
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-current protection, Over-heat protection		
	Compressor		Discharge thermo protection, Over-current protection		
Refrigerant	Type X Original charge		R410A X 11.5kg (25 lb + 6 oz)	R410A X 11.5kg (25 lb + 6 oz)	

OUTDOOR UNIT
Y Series
PUHY-P TSHM-A



► Specifications

Set name			PUHY-P500TSHM-A(-BS)		PUHY-P550TSHM-A(-BS)		PUHY-P600TSHM-A(-BS)		
Power source			3-phase 3-wire 208-220-230V 60Hz						
Cooling capacity (Nominal)	※1	kW	56.0		63.0		69.0		
		kcal/h	48,200		54,200		59,300		
		Btu/h	191,100		215,000		235,400		
	Power input	kW	17.68		18.01		21.84		
		Current input	A	54.5-51.5-49.3		55.5-52.5-50.2		67.3-63.6-60.9	
		COP (kW/kW)	3.16		3.49		3.15		
Temp. range of cooling	Indoor	W.B.	15-24°C (59-75°F)						
	Outdoor	D.B.	- 5-43°C (23-109°F)						
Heating capacity (Nominal)	※2	kW	63.0		69.0		76.5		
		kcal/h	54,200		59,300		65,800		
		Btu/h	215,000		235,400		261,000		
	Power input	kW	17.12		18.48		20.35		
		Current input	A	52.8-49.9-47.7		56.9-53.8-51.5		62.7-59.3-56.7	
		COP (kW/kW)	3.67		3.73		3.75		
Temp. range of heating	Indoor temp.	D.B.	15-27°C (59-81°F)						
	Outdoor temp.	W.B.	-20-15.5°C (-4-60°F)						
Indoor unit connectable	Total capacity		50-130% of outdoor unit capacity						
	Model/Quantity		P20-P500 / 1-20		P20-P500 / 1-20		P20-P500 / 1-32		
Noise level (measured in anechoic room)	dB<A>		60		61		62		
Diameter of refrigerant pipe	Liquid	mm(in.)	ø15.88 (ø5/8) Brazed		ø15.88 (ø5/8) Brazed		ø15.88 (ø5/8) Brazed		
	Gas	mm(in.)	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed		
Outdoor unit 1 and Outdoor unit 2			PUHY-P250THM-A(-BS)	PUHY-P250THM-A(-BS)	PUHY-P250THM-A(-BS)	PUHY-P300THM-A(-BS)	PUHY-P250THM-A(-BS)	PUHY-P350THM-A(-BS)	
External finish			Pre-coated galvanized steel sheet <MUNSELL 5Y 8/1>						
External dimension H X W X D	mm(in.)		1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	
Net weight	kg(lb)		185 (408)	185 (408)	185 (408)	210 (463)	185 (408)	210 (463)	
Heat exchanger			Salt-resistant cross fin & copper tube						
Compressor	Type		Inverter scroll hermetic compressor						
	Starting method		Inverter						
FAN	Motor output	kW	6.7	6.7	6.7	8.2	6.7	10.1	
	Air flow rate	m³/min	185	185	185	185	185	185	
		L/s	3,083	3,083	3,083	3,083	3,083	3,083	
		cfm	6,532	6,532	6,532	6,532	6,532	6,532	
	Type X Quantity		Propeller fan X 1	Propeller fan X 1	Propeller fan X 1	Propeller fan X 1	Propeller fan X 1	Propeller fan X 1	
Motor output		kW	0.35 X 1	0.35 X 1	0.35 X 1	0.35 X 1	0.35 X 1	0.35 X 1	
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)						
	Inverter circuit (COMP./FAN)		Over-current protection, Over-heat protection						
	Compressor		Discharge thermo protection, Over-current protection						
Refrigerant	Type X Original charge		R410A X 6.5kg (14 lb + 5 oz)	R410A X 6.5kg (14 lb + 5 oz)	R410A X 6.5kg (14 lb + 5 oz)	R410A X 9.0kg (19 lb + 13 oz)	R410A X 6.5kg (14 lb + 5 oz)	R410A X 9.0kg (19 lb + 13 oz)	
Twinning kit (optional)			CMY-Y100VBK		CMY-Y100VBK		CMY-Y100VBK		

Note:

※1 Nominal cooling conditions
Indoor 27°C (81°F) DB/19°C (66°F) WB, Outdoor 35°C (95°F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20°C (68°F) DB,Outdoor 7°C (45°F) DB/6°C (43°F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

Note:

※1 Nominal cooling conditions
Indoor 27°C (81°F) DB/19°C (66°F) WB, Outdoor 35°C (95°F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20°C (68°F) DB,Outdoor 7°C (45°F) DB/6°C (43°F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

OUTDOOR UNIT
Y Series
PUHY-P TSHM-A



► Specifications

Set name			PUHY-P650TSHM-A(-BS)		PUHY-P700TSHM-A(-BS)		PUHY-P750TSHM-A(-BS)		PUHY-P800TSHM-A(-BS)	
Power source			3-phase 3-wire 208-220-230V 60Hz							
Cooling capacity (Nominal)	※1	kW	73.0		80.0		85.0		90.0	
		kcal/h	62,800		68,800		73,100		77,400	
		Btu/h	249,100		273,000		290,000		307,100	
	Power input	kW	22.44		26.11		26.84		29.63	
		Current input	A	69.2-65.4-62.5		80.5-76.1-72.8		82.7-78.2-74.8		91.3-86.3-82.6
COP (kW / kW)		3.25		3.06		3.16		3.03		
Temp. range of cooling	Indoor	W.B.	15~24°C (59~75°F)							
	Outdoor	D.B.	- 5~43°C (23~109°F)							
Heating capacity (Nominal)	※2	kW	81.5		88.0		95.0		100.0	
		kcal/h	70,100		75,700		81,700		86,000	
		Btu/h	278,100		300,300		324,100		341,200	
	Power input	kW	21.34		23.75		24.75		26.36	
		Current input	A	65.8-62.2-59.5		73.2-69.2-66.2		76.3-72.1-69.0		81.2-76.8-73.5
COP (kW/kW)		3.81		3.70		3.83		3.79		
Temp. range of heating	Indoor temp.	D.B.	15~27°C (59~81°F)							
	Outdoor temp.	W.B.	-20~15.5°C (-4~60°F)							
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity							
	Model/Quantity		P20~P500 / 1~32		P20~P500 / 1~32		P20~P500 / 1~32		P20~P500 / 1~32	
Noise level (measured in anechoic room)			dB <A>		62.5		63		63.5	
Diameter of refrigerant pipe	Liquid	mm(in.)	ø15.88 (ø5/8) Brazed		ø19.05 (ø3/4) Brazed		ø19.05 (ø3/4) Brazed		ø19.05 (ø3/4) Brazed	
	Gas	mm(in.)	ø28.58 (ø1-1/8) Brazed		ø34.93 (ø1-1/4) Brazed		ø34.93 (ø1-1/4) Brazed		ø34.93 (ø1-1/4) Brazed	
Outdoor unit 1 and Outdoor unit 2			PUHY-P300THM-A (-BS)	PUHY-P350THM-A (-BS)	PUHY-P350THM-A (-BS)	PUHY-P350THM-A (-BS)	PUHY-P350THM-A (-BS)	PUHY-P400THM-A (-BS)	PUHY-P350THM-A (-BS)	PUHY-P450THM-A (-BS)
External finish			Pre-coated galvanized steel sheet <MUNSELL 5Y 8/1>							
External dimension H × W × D			mm(in.)	1,650 × 920 × 760 (65 X 36-1/4 X 29-15/16)	1,650 × 920 × 760 (65 X 36-1/4 X 29-15/16)	1,650 × 920 × 760 (65 X 36-1/4 X 29-15/16)	1,650 × 920 × 760 (65 X 36-1/4 X 29-15/16)	1,650 × 920 × 760 (65 X 36-1/4 X 29-15/16)	1,650 × 1,220 × 760 (65 X 48-1/16 X 29-15/16)	1,650 × 1,220 × 760 (65 X 48-1/16 X 29-15/16)
Net weight			kg(lb)	210 (463)	210 (463)	210 (463)	210 (463)	210 (463)	240 (529)	240 (529)
Heat exchanger			Salt-resistant cross fin & copper tube							
Compressor	Type		Inverter scroll hermetic compressor							
	Starting method		Inverter							
FAN	Motor output	kW	8.2	10.1	10.1	10.1	10.1	10.5	10.1	12.0
	Air flow rate	m ³ /min	185	185	185	185	185	225	185	225
		L/s	3,083	3,083	3,083	3,083	3,083	3,750	3,083	3,750
		cfm	6,532	6,532	6,532	6,532	6,532	7,945	6,532	7,945
	Type × Quantity		Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 1
	Motor output	kW	0.35 × 1	0.35 × 1	0.35 × 1	0.35 × 1	0.35 × 1	0.46 × 1	0.35 × 1	0.46 × 1
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)							
	Inverter circuit (COMP./FAN)		Over-current protection, Over-heat protection							
	Compressor		Discharge thermo protection, Over-current protection							
Refrigerant	Type × Original charge		R410A × 9.0kg (19 lb + 13 oz)	R410A × 9.0kg (19 lb + 13 oz)	R410A × 9.0kg (19 lb + 13 oz)	R410A × 9.0kg (19 lb + 13 oz)	R410A × 9.0kg (19 lb + 13 oz)	R410A × 11.5kg (25 lb + 6 oz)	R410A × 9.0kg (19 lb + 13 oz)	R410A × 11.5kg (25 lb + 6 oz)
Twinning kit (optional)			CMY-Y100VBK		CMY-Y100VBK		CMY-Y200VBK		CMY-Y200VBK	

Note:

※1 Nominal cooling conditions
Indoor 27°C (81°F) DB/19°C (66°F) WB, Outdoor 35°C (95°F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20°C (68°F) DB,Outdoor 7°C (45°F) DB/6°C (43°F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

OUTDOOR UNIT
Y Series
PUHY-P TSHM-A



► Specifications

Set name			PUHY-P850TSHM-A(-BS)			PUHY-P900TSHM-A(-BS)		
Power source			3-phase 3-wire 208-220-230V 60Hz					
Cooling capacity (Nominal)	※1	kW	96.0			101.0		
		kcal/h	82,600			86,900		
		Btu/h	327,600			344,600		
	Power input	kW	30.26			33.35		
		Current input	A	93.3-88.2-84.3			102.8-97.2-93.0	
	COP (kW/kW)		3.17			3.02		
Temp. range of cooling	Indoor	W.B.	15-24°C (59-75°F)					
	Outdoor	D.B.	- 5-43°C (23-109°F)					
Heating capacity (Nominal)	※2	kW	108.0			113.0		
		kcal/h	92,900			97,200		
		Btu/h	368,500			385,600		
	Power input	kW	26.92			28.65		
		Current input	A	83.0-78.4-75.0			88.3-83.5-79.9	
	COP (kW/kW)		4.01			3.94		
Temp. range of heating	Indoor temp.	D.B.	15-27°C (59-81°F)					
	Outdoor temp.	W.B.	-20-15.5°C (-4-60°F)					
Indoor unit connectable	Total capacity		50-130% of outdoor unit capacity					
	Model/Quantity		P20-P500 / 1-42			P20-P500 / 1-42		
Noise level (measured in anechoic room)		dB<A>	64.5			65		
Diameter of refrigerant pipe	Liquid	mm(in.)	ø19.05 (ø3/4) Brazed			ø19.05 (ø3/4) Brazed		
	Gas	mm(in.)	ø41.28 (ø1-1/2) Brazed			ø41.28 (ø1-1/2) Brazed		
Outdoor unit 1 and Outdoor unit 2			PUHY-P400THM-A(-BS)		PUHY-P450THM-A(-BS)		PUHY-P450THM-A(-BS)	
External finish			Pre-coated galvanized steel sheet <MUNSELL 5Y 8/1>					
External dimension H X W X D		mm(in.)	1,650 X 1,220 X 760 (65 X 48-1/16 X 29-15/16)		1,650 X 1,220 X 760 (65 X 48-1/16 X 29-15/16)		1,650 X 1,220 X 760 (65 X 48-1/16 X 29-15/16)	
Net weight		kg(lb)	240 (529)		240 (529)		240 (529)	
Heat exchanger			Salt-resistant cross fin & copper tube					
Compressor	Type		Inverter scroll hermetic compressor					
	Starting method		Inverter					
FAN	Motor output	kW	10.5		12.0		12.0	
	Air flow rate	m³/min	225		225		225	
		L/s	3,750		3,750		3,750	
		cfm	7,945		7,945		7,945	
	Type X Quantity		Propeller fan X 1		Propeller fan X 1		Propeller fan X 1	
	Motor output	kW	0.46 X 1		0.46 X 1		0.46 X 1	
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)					
	Inverter circuit (COMP./FAN)		Over-current protection, Over-heat protection					
	Compressor		Discharge thermo protection, Over-current protection					
Refrigerant		Type X Original charge	R410A X 11.5kg (25 lb + 6 oz)		R410A X 11.5kg (25 lb + 6 oz)		R410A X 11.5kg (25 lb + 6 oz)	
Twinning kit (optional)			CMY-Y200VBK				CMY-Y200VBK	

Note:

※1 Nominal cooling conditions
Indoor 27°C (81°F) DB/19°C (66°F) WB, Outdoor 35°C (95°F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20°C (68°F) DB,Outdoor 7°C (45°F) DB/6°C (43°F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

OUTDOOR UNIT
Y Series
PUHY-P TSHM-A



► Specifications

Set name			PUHY-P950TSHM-A(-BS)			PUHY-P1000TSHM-A(-BS)			PUHY-P1050TSHM-A(-BS)			PUHY-P1100TSHM-A(-BS)			PUHY-P1150TSHM-A(-BS)			
Power source			3-phase 3-wire 208-220-230V 60Hz															
Cooling capacity (Nominal)	※1	kW	108.0			113.0			118.0			124.0			130.0			
		kcal/h	92,900			97,200			101,500			106,600			111,800			
	※1	Btu/h	368,500			385,600			402,600			423,100			443,600			
		Power input	kW	30.82			32.5			36.11			39.93			43.3		
		Current input	A	95.0-89.8-85.9			100.2-94.7-90.6			111.3-105.2-100.7			123.1-116.4-111.3			133.5-126.2-120.7		
		COP (kW/kW)		3.50			3.47			3.26			3.10			3.00		
Temp. range of cooling	Indoor	W.B.	15~24°C (59~75°F)															
	Outdoor	D.B.	- 5~43°C (23~109°F)															
Heating capacity (Nominal)	※2	kW	119.5			127.0			132.0			140.0			145.0			
		kcal/h	102,800			109,200			113,500			120,400			124,700			
	※2	Btu/h	407,700			433,300			450,400			477,700			494,700			
		Power input	kW	29.60			31.68			33.87			36.36			38.34		
		Current input	A	91.2-86.3-82.5			97.7-92.3-88.3			104.4-98.7-94.4			112.1-106.0-101.4			118.2-111.7-106.9		
		COP (kW/kW)		4.03			4.00			3.89			3.85			3.78		
Temp. range of heating	Indoor temp.	D.B.	15~27°C (59~81°F)															
	Outdoor temp.	W.B.	-20~15.5°C (-4~60°F)															
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity															
	Model/Quantity		P20~P500 / 1~42			P20~P500 / 2~42			P20~P500 / 2~42			P20~P500 / 2~42			P20~P500 / 2~42			
Noise level (measured in anechoic room)		dB<A>	64			64.5			65			65			65.5			
Diameter of refrigerant pipe	Liquid	mm(in.)	ø19.05 (ø3/4) Brazed			ø19.05 (ø3/4) Brazed			ø19.05 (ø3/4) Brazed			ø19.05 (ø3/4) Brazed			ø19.05 (ø3/4) Brazed			
	Gas	mm(in.)	ø41.28 (ø1-5/8) Brazed			ø41.28 (ø1-5/8) Brazed			ø41.28 (ø1-5/8) Brazed			ø41.28 (ø1-5/8) Brazed			ø41.28 (ø1-5/8) Brazed			
Outdoor unit 1 and Outdoor unit 2			PUHY-P250THM-A(-BS)	PUHY-P300THM-A(-BS)	PUHY-P400THM-A(-BS)	PUHY-P300THM-A(-BS)	PUHY-P300THM-A(-BS)	PUHY-P400THM-A(-BS)	PUHY-P300THM-A(-BS)	PUHY-P300THM-A(-BS)	PUHY-P400THM-A(-BS)	PUHY-P300THM-A(-BS)	PUHY-P350THM-A(-BS)	PUHY-P400THM-A(-BS)	PUHY-P350THM-A(-BS)	PUHY-P450THM-A(-BS)		
External finish			Pre-coated galvanized steel sheet <MUNSELL 5Y 8/1>															
External dimension H × W × D	mm(in.)		1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 1,220 X 760 (65 X 48-1/16 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 1,220 X 760 (65 X 48-1/16 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 1,220 X 760 (65 X 48-1/16 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 1,220 X 760 (65 X 48-1/16 X 29-15/16)	1,650 X 920 X 760 (65 X 36-1/4 X 29-15/16)	1,650 X 1,220 X 760 (65 X 48-1/16 X 29-15/16)		
		Net weight	kg(lb)	185 (408)	210 (463)	240 (529)	210 (463)	240 (529)	210 (463)	240 (529)	210 (463)	240 (529)	210 (463)	240 (529)	210 (463)	240 (529)	210 (463)	240 (529)
Heat exchanger			Salt-resistant cross fin & copper tube															
Compressor	Type		Inverter scroll hermetic compressor															
	Starting method		Inverter															
FAN	Motor output	kW	6.7	8.2	10.5	8.2	8.2	10.5	8.2	10.1	10.5	8.2	10.1	10.5	10.1	10.1	12.0	
		Air flow rate	m³/min	185	185	225	185	185	225	185	185	225	185	185	225	185	185	225
			L/s	3,083	3,083	3,750	3,083	3,083	3,750	3,083	3,083	3,750	3,083	3,083	3,750	3,083	3,083	3,750
		cfm	6,532	6,532	7,945	6,532	6,532	7,945	6,532	6,532	7,945	6,532	6,532	7,945	6,532	6,532	7,945	
	Type × Quantity		Propeller fan × 1			Propeller fan × 1			Propeller fan × 1			Propeller fan × 1			Propeller fan × 1			
		Motor output	kW	0.35 × 1	0.35 × 1	0.46 × 1	0.35 × 1	0.35 × 1	0.46 × 1	0.35 × 1	0.35 × 1	0.46 × 1	0.35 × 1	0.35 × 1	0.46 × 1	0.35 × 1	0.35 × 1	0.46 × 1
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)															
	Inverter circuit (COMP./FAN)		Over-current protection, Over-heat protection															
	Compressor		Discharge thermo protection, Over-current protection															
Refrigerant	Type × Original charge		R410A × 6.5kg (14 lb+5 oz)	R410A × 9.0kg (19 lb+13 oz)	R410A × 11.5kg (25 lb+6 oz)	R410A × 9.0kg (19 lb+13 oz)	R410A × 9.0kg (19 lb+13 oz)	R410A × 11.5kg (25 lb+6 oz)	R410A × 9.0kg (19 lb+13 oz)	R410A × 9.0kg (19 lb+13 oz)	R410A × 11.5kg (25 lb+6 oz)	R410A × 9.0kg (19 lb+13 oz)	R410A × 9.0kg (19 lb+13 oz)	R410A × 11.5kg (25 lb+6 oz)	R410A × 9.0kg (19 lb+13 oz)	R410A × 11.5kg (25 lb+6 oz)		
Twinning kit (optional)			CMY-Y300VBK			CMY-Y300VBK			CMY-Y300VBK			CMY-Y300VBK			CMY-Y300VBK			

Note:

- ※1 Nominal cooling conditions
Indoor 27°C (81°F) DB/19°C (66°F) WB, Outdoor 35°C (95°F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)
- ※2 Nominal heating conditions
Indoor 20°C (68°F) DB,Outdoor 7°C (45°F) DB/6°C (43°F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

Outdoor unit

OUTDOOR UNIT
Y Series
PUHY-P TSHM-A



► Specifications

Set name			PUHY-P1200TSHM-A(-BS)				PUHY-P1250TSHM-A(-BS)			
Power source			3-phase 3-wire 208-220-230V 60Hz				3-phase 3-wire 208-220-230V 60Hz			
Cooling capacity (Nominal)	※1	kW	136.0				140.0			
	※1	kcal/h	117,000				120,400			
	※1	Btu/h	464,000				477,700			
	Power input	kW	44.25				47.04			
	Current input	A	136.4-129.0-123.4				145.0-137.1-131.2			
	COP (kW/kW)		3.07				2.97			
Temp. range of cooling	Indoor	W.B.	15~24°C (59~75°F)							
	Outdoor	D.B.	- 5~43°C (23~109°F)							
Heating capacity (Nominal)	※2	kW	150.0				156.5			
	※2	kcal/h	129,000				134,600			
	※2	Btu/h	511,800				534,000			
	Power input	kW	39.04				40.43			
	Current input	A	120.4-113.8-108.8				124.6-117.8-112.7			
	COP (kW/kW)		3.84				3.87			
Temp. range of heating	Indoor temp.	D.B.	15~27°C (59~81°F)							
	Outdoor temp.	W.B.	-20~15.5°C (-4~60°F)							
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity							
	Model/Quantity		P20~P500 / 2~42				P20~P500 / 2~42			
Noise level (measured in anechoic room)			dB<A>		66		66			
Diameter of refrigerant pipe	Liquid	mm(in.)	ø19.05 (ø3/4) Brazed				ø19.05 (ø3/4) Brazed			
	Gas	mm(in.)	ø41.28 (ø1-5/8) Brazed				ø41.28 (ø1-5/8) Brazed			
Outdoor unit 1 and Outdoor unit 2			PUHY-P350THM-A(-BS)	PUHY-P400THM-A(-BS)	PUHY-P450THM-A(-BS)	PUHY-P350THM-A(-BS)	PUHY-P450THM-A(-BS)	PUHY-P450THM-A(-BS)	PUHY-P450THM-A(-BS)	
External finish			Pre-coated galvanized steel sheet <MUNSELL 5Y 8/1>							
External dimension H × W × D		mm (in.)	1,650 × 920 × 760 (65 × 36-1/4 × 29-15/16)	1,650 × 1,220 × 760 (65 × 48-1/16 × 29-15/16)	1,650 × 1,220 × 760 (65 × 48-1/16 × 29-15/16)	1,650 × 920 × 760 (65 × 36-1/4 × 29-15/16)	1,650 × 1,220 × 760 (65 × 48-1/16 × 29-15/16)	1,650 × 1,220 × 760 (65 × 48-1/16 × 29-15/16)	1,650 × 1,220 × 760 (65 × 48-1/16 × 29-15/16)	
Net weight		kg (lb)	210 (463)	240 (529)	240 (529)	210 (463)	240 (529)	240 (529)	240 (529)	
Heat exchanger			Salt-resistant cross fin & copper tube							
Compressor	Type		Inverter scroll hermetic compressor							
	Starting method		Inverter							
FAN	Motor output	kW	10.1	10.5	12.0	10.1	12.0	12.0		
	Air flow rate	m³/min	185	225	225	185	0.045 (230V)	0.045 (230V)		
		L/s	3,083	3,750	3,750	3,083	3,750	3,750		
		cfm	6,532	7,945	7,945	6,532	7,945	7,945		
	Type × Quantity		Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	
	Motor output	kW	0.35 × 1	0.46 × 1	0.46 × 1	0.35 × 1	0.46 × 1	0.46 × 1		
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)							
	Inverter circuit (COMP./FAN)		Over-current protection, Over-heat protection							
	Compressor		Discharge thermo protection, Over-current protection							
Refrigerant	Type × Original charge		R410A × 9.0kg (19 lb + 13 oz)	R410A × 11.5kg (25 lb + 6 oz)	R410A × 11.5kg (25 lb + 6 oz)	R410A × 9.0kg (19 lb + 13 oz)	R410A × 11.5kg (25 lb + 6 oz)	R410A × 11.5kg (25 lb + 6 oz)		
Twinning kit (optional)			CMY-Y300VBK				CMY-Y300VBK			



Optional parts

OPTIONAL PARTS FOR INDOOR UNITS

>>4-way cassette type (PLFY-VAM)

Description	Model	Applicable capacity
		VAM
Decoration panel	SLP-2AA	—
	PLP-6AA	P32, P40, P50, P63, P80, P100, P125
Multi-function casement	PAC-SG03TM-E	P32, P40, P50, P63, P80, P100, P125
High-efficiency filter element	PAC-SG01KF	P80, P100, P125
Air outlet shutter plate (1 set)	PAC-SG06SP-E	P32, P40, P50, P63, P80, P100, P125

>>2-way cassette type (PLFY-VLMD)

Description	Model	Applicable capacity
		PLFY-VLMD-B
Decoration panel	CMP-40VLW-B	P20, P25, P32, P40
	CMP-63VLW-B	P50, P63
	CMP-100VLW-B	P80, P100
	CMP-125VLW-B	P125
OA duct flange	PAC-KH11OF	P20, P25, P32, P40, P50, P63, P80, P100

>>1-way cassette type(PMFY-VBM)

Description	Model	Applicable capacity
Decoration panel	PMP-40BM	P20, P25, P32, P40

>>Ceiling concealed type (PEFY-VMH)

Description	Model	Applicable capacity	Remarks
		PEFY-VMH	
Drain lift-up mechanism	PAC-KE04DM-F	P40~P250	
Long life filter	PAC-KE86LAF	P40, P50, P63	
	PAC-KE88LAF	P71, P80	
	PAC-KE89LAF	P100, P125, P140	
	PAC-KE85LAF	P200, P250	
Filter box	PAC-KE63TB-F	P40, P50, P63	Necessary when long life filter is used
	PAC-KE80TB-F	P71, P80	
	PAC-KE140TB-F	P100, P125, P140	
	PAC-KE250TB-F	P200, P250	

>>Ceiling concealed type (PDFY-VM)

Description	Model	Applicable capacity	Remarks	Description	Model	Applicable capacity	Remarks
Drain lift-up mechanism	PAC-KD02DM-FA	P20-P125		Filter box for bottom suction	PAC-KD70TB	P20, P25, P32	Nesessary when efficiency filter is used at the bottom of the indoor unit
Square shape duct flange	PAC-KD60KDF	P20, P25, P32			PAC-KD71TB	P40, P50	
	PAC-KD61KDF	P40, P50			PAC-KD73TB	P63, P71, P80	
	PAC-KD63KDF	P63, P71, P80			PAC-KD74TB	P100, P125	
Round shape duct flange	PAC-KD64KDF	P100, P125		High efficiency filter 65%	PAC-KD30AF	P20, P25, P32	
	PAC-KD32EDF-F	P20, P25, P32			PAC-KD31AF	P40, P50	
	PAC-KD50EDF-F	P40, P50			PAC-KD33AF	P63, P71, P80	
	PAC-KD80EDF-F	P63, P71, P80			PAC-KD34AF	P100, P125	
Filter box for rear suction	PAC-KD125EDF-F	P100, P125	Necessary when air intake duct or high efficiency filter is used at the rear of the indoor unit	High efficiency filter 90%	PAC-KD40AF	P20, P25, P32	
	PAC-KD80RTB	P20, P25, P32			PAC-KD41AF	P40, P50	
	PAC-KD81RTB	P40, P50			PAC-KD43AF	P63, P71, P80	
	PAC-KD83RTB	P63, P71, P80			PAC-KD44AF	P100, P125	
Canvas duct for bottom suction	PAC-KD84RTB	P100, P125		Maintenance panel with air intake	MCMP-P36DSWH	P20, P25, P32	
	PAC-KD85DF	P20, P25, P32			MCMP-P56DSWH	P40, P50	
	PAC-KD86DF	P40, P50			MCMP-P90DSWH	P63, P71, P80	
	PAC-KD88DF	P63, P71, P80			MCMP-P160DSWH	P100, P125	
	PAC-KD89DF	P100, P125					

>>Fresh air intake type (PEFY-VMH-E-F)

Description	Model	Applicable capacity
Long life filter	PAC-KE88LAF	P80
	PAC-KE89LAF	P140
	PAC-KE85LAF	P200, P250
Filter box	PAC-KE80TB-F	P80
	PAC-KE140TB-F	P140
	PAC-KE250TB-F	P200/P250
Drain water lift-up kit	PAC-KE04DM-F	P80, P140, P200, P250

>>Ceiling suspended type (PCFY-VGM)

Description	Model	Applicable capacity
High efficiency filter	PAC-SE80KF-E	P40
	PAC-SE81KF-E	P63, P100
	PAC-SE82KF-E	P125
	PAC-SE84DMA	P40
Drain lift-up mechanism	PAC-SE85DMA	P63
	PAC-SH17DM-E	P100, P125

OPTIONAL PARTS FOR OUTDOOR UNITS

>>For PUHY series

Description	Model	Remarks
High static pressure motor	PAC-KBU06MT-F	~ 60Pa
Twinning kit	CMY-Y100VBK	For PUHY-P500~P700TSHM
	CMY-Y200VBK	For PUHY-P750~P900TSHM
	CMY-Y300VBK	For PUHY-P950~P1250TSHM

>>For PUHY series

Description	Model	Total capacity of indoor unit
Branch pipe (Joint)	CMY-Y102S-G	200 or below
	CMY-Y102L-G1	201-400
	CMY-Y202-G1	401-650
		The 1st branch of P450~P650
	CMY-Y302-G1	651 or above
Branch pipe (Header)	CMY-Y104-G	The 1st branch of P700~P1250
		For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches

Note : Indoor unit capacities
The capacity of an indoor unit is the same as the number used for its type identification.

>>For PUMY-P100 , P125 , P140 VHM

Description	Model
Branch Pipe (2 Branch)	CMY-Y62-G-E
Header	CMY-Y64-G-E
Header	CMY-Y68-G-E
Drain Socket	PAC-SG61DS-E
Centralized Drain Pan	PAC-SG64DP-E
Port Connector (ø9.52 → ø12.7)	PAC-SG73RJ-E
Port Connector (ø15.88 → ø19.05)	PAC-SG75RJ-E
Air Protect Guide (2 pcs required)	PAC-SH63AG-E

OPTIONAL PARTS FOR CONTROL

Description	Model
PAC-SE41TS	Remote Sensor for A/J/K/M-Net Control
PAC-SE55RA	Remote ON/OFF adaptor for Indoor Unit
PAC-YG10HA	Cable for G-50 I/O
PAC-SC50KUA	Power supply unit for G-50 / GB-50
PAC-SA88HA	Remote Display Adaptor for Indoor Unit
PAC-SA89TA	Timer Adaptor for
PAC-SC36NA	Output signal connector
PAC-SC37SA	Input signal connector
PAC-SF46EP	Transmission booster
LMAP02	Air conditioner interface
PAC-YG41CDA	PLC software for demand input
PAC-YG11CDA	Electric amount count software
PAC-YG21CDA	PLC software for general equipment
PAC-YG31CDA	BAC net™ interface

Maintaining equipments

Maintenance cycle [Note that maintenance cycle does not mean guarantee period.]

Following tables are applicable when using equipments under the conditions below.

- ❶

Normal use without frequent START/STOPs (The number of START/STOPs is assumed to be less than 6 times per hour in normal use.)
- ❷

Operating hours are assumed to be 10 hours per day/2500 hours per year.
Under the following conditions, equipments may not be able to used at all, or maintenance cycle and replacement cycle of equipments may need to be shortened.
- ❶

When using equipments in high temperature and humidity or in rapid changes in temperature and humidity
- ❷

When using equipments in a big electric change of power voltage, frequency, and waveform distortion (They cannot be used outside of acceptable range.)
- ❸

When using equipments installed in a place where there is a lot of vibration
- ❹

When using equipments in the air with hazardous gas or oil mist as well as dust, salinity, and sulfur dioxide/hydrogen sulfide
- ❺

When using equipments with frequent START/STOP or long operating hours

Table 1. Maintenance cycle

Major components	Checking cycle	Maintenance cycle	Major components	Checking cycle	Maintenance cycle
Compressor	1 year	20,000 hours	Expansion valve	1 year	20,000 hours
Motor (Fan, Louver, drain pump)		20,000 hours	Valve (solenoid valve, four-way valve)		20,000 hours
Bearing		15,000 hours	Sensor (thermistor, presser sensor)		5 years
Electric board		25,000 hours	Drain pan		8 years
Heat exchanger		5 years			

Note1 This table shows major components. Refer to the maintenance contract for details.
Note2 This maintenance cycle shows a period in which products are expected to require no maintenance. Use this cycle for planning maintenance (budgeting the maintenance expense etc.) Checking/ Maintenance cycle may be shorter than the one on this table depending on the contents of maintenance check contract.

- Sudden unpredictable accident may occur even if check-up is performed.

Replacement cycle of consumable components
[Note that replacement cycle does not mean guarantee period.]

Table 2. Replacement cycle

Major components	Checking cycle	Replacement cycle
Long-life filter	1 year	5 years
High-performance filter		1 year
Fan belt		5,000 hours
Smoothing capacitor		10 years
Fuse		10 years
Crank case heater		8 years

Note1 This table shows major components. Refer to the maintenance contract for details.
Note2 This replacement cycle shows a period in which products are expected to require no replacements. Use this cycle for planning maintenance (budgeting expenses for replacing equipments etc.)





FM33568 / ISO 9001:2000

The Air Conditioning & Refrigeration Systems Works acquired ISO 9001 certification under Series 9000 of the International Standard Organization (ISO) based on a review of Quality management for the production of refrigeration and air conditioning equipment.

ISO Authorization System

The ISO 9000 series is a plant authorization system relating to quality management as stipulated by the ISO. ISO 9001 certifies quality management based on the "design, development, production, installation and auxiliary services" for products built at an authorized plant.



Certificate Number EC97J1227

The Air Conditioning & Refrigeration Systems Works acquired environmental management system standard ISO 14001 certification.

The ISO 14000 series is a set of standards applying to environmental protection set by the International Standard Organization (ISO).

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